


# TEXT BOOK
## OF THE
# PRINCIPLES AND PRACTICE
## OF
# MEDICINE

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OF
# MEDICINE

(PART ONE)

BY

D R DHAR M B , D T M (Cal ) M R C P (Lond )

Professor of Clinical Medicine Lake Medical College Former Hony Additional Visiting Physician Medical College *Calcutta* Former *Associate Professor of Medicine* National Medical Institute Former Hony Visiting Physician Infectious Ward Campbell Hospital etc

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MADE IN INDIA

TO MY BROTHERS

WITH GRATITUDE

No special mention has been made of so-called tropical disease because of present efforts at unification of the world in thoughts and ideas discouraging isolationism. Diseases like human life is global in distribution and wherever there is life at its defects there will be disease. It has neither limit nor barrier as is amply proved by the ravage of Cholera, Small-pox, Plague and others in Europe and other cold countries. But it was of their material and scientific progress and sanitary sense and health consciousness of the masses which helped to drive and banish diseases from their respective countries. But as orient lacked them it could not do so. In the present text the conditions and diseases so-called tropical, sub-tropical have been more or less adequately described combined with diseases though not tropical, yet are found in practice in warm lands and spaces have been alloted according to their frequency and importance in tropics and sub-tropics in general and India in particular.

In the present volume which is the first part of the text to be completed in its second one has been included most infections by protozoa, bacteria, viruses, rickettsia, spirochaete, metazoa, fluke, snakes and other arthropod and diseases caused by thermal, chemical and physical agents, drug habits and poisonings, diseases of metabolism and deficiency state and also those of kidneys and cardiovascular systems with special reference to Indian diet and practice. In short the ambitious task of writing a comprehensive text book adequate for tropical and sub-tropical and particularly Indian students and practitioners has been attempted. The rest of the subject is expected to be covered by the second part.

All throughout the text more stress has been laid on clinical than on laboratory data and more on principles than on details and above all for easy comprehension of the inner working of the human system a new item correlating symptoms and signs with lesions has been added in many infectious and other diseases under the heading of *Clinical pathology* a departure from the average text books except under conditions where pathology itself is self explanatory. This was thought essential for us where laboratory facilities are not within easy reach hence it is expected that an insight into the inner working will help much to develop the clinical eye and the clinical sense so essential for successful practice without much laboratory aid in far off and rural areas.

I do not share the idea of those teachers of Medicine who suggest that comprehensive text books are rather unsuitable for senior students and that short texts are better. But are they not the future practitioners of our country, for whom an easy comprehension and an allround grasp of the subject appears to me the first step to assist notably in memorising and also for easy diagnosis and proper rational treatment, thus to turn out ultimate good clinicians and also to derive the maximum out of the clinical material in hospitals during studies and training because symptoms and signs are mostly manifestations only reflections of the inner working of the system in disease.

Wherever feasible Indian facts, data, diet and modes of life have been given and also the problems of our country presented so that the impressionable student and the young doctor may think on them for their ultimate solution however enormous they might appear.

Practitioners and students interested in elaborate scientific medical treatment under Indian circumstances under indigenous environments and dietary list will find my Medical Treatment in General Practice with recent advance (second edition) helpful.

Many of the blocks in this text have been taken from the Memoranda on Medical Diseases in Tropical and sub tropical areas published by His Majesty's stationary office, London which I gratefully acknowledge. There are other sources which have been thankfully acknowledged. The rest are from my own patients whom I thank. The printing mistakes are regretted.

Only a workable index has been given to the end because a detailed one is expected to follow after the completion of the work in its second volume to see the light of the day in near future.

D. R. DHAR

*Lake Medical College and Hospitals*
*Calcutta*
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## DISEASES OF THE KIDNEYS

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## INFECTION IMMUNITY ETC

**Infective agents**—The human host is constantly exposed to various infective agents of which bacteria rickettsia viruses fungi protozoa and matazoa or animal parasites are the commonest The human defensive mechanism is a complicated one and its efficiency varies according to the individual

**Infection**—The implantation and development of the parasitising organism upon the tissues of the host constitute infection which need not necessarily be followed by disease because the resistance of the host may completely overcome such an infection The result following an infection will vary according to the susceptibility or immunity of the individual and it is a relative affair because the same person while withstanding a mild infection may fall victim to a more severe one

**Results of infection**—Usually depend upon (1) the intensity of the infecting organism and (2) the activity of the defensive mechanism of the host When the intensity of the infection is slight and the defensive mechanism of the host active no clinical manifestations are likely to appear although the tissue juices and cells acquire some immunity and the infection is likely to be latent or silent On the other hand if the infection is sufficiently intense to overcome the resistance definite clinical manifestations of disease occur resulting in either death or recovery with the production of active immunity like the type acquired by repeated small infections not sufficiently pronounced to cause frank illness or like the one produced by injections of vaccine and other active immunising antigens

Though as a rule such an immune individual is generally able to destroy an invading organism rapidly yet occasionally

and enhance this immunity This method is partly utilised to produce active immunity against tetanus diphtheria etc by injection of toxoid etc and also by injections of vaccines and other antigens (5) **Artificial immunity** is produced by stimulating the mechanism of fight to produce specific protective substances and this may be **active** (as suggested just now) or it may be got by conferring ready made immune substances into the host called **passive immunity** and is usually short lasting and serotherapy of various types are the best examples

For the details of methods of active and passive immunisation and their indications and mechanism etc other detailed literature and books need be consulted

Though the evidence is not fully conclusive yet the effects of nutrition vitamins good diet fatigue and adverse atmospheric circumstances are more or less definite and demonstrable on resistance The social economic and other implications of disease processes and also the effect of atmospheric variations and infection through air contamination and others are gradually forming subjects of further and intensive study But certainly infections are more common and usually show greater fatality in the the lower economic strata than amongst the fortunate rich who not only by their better resistance but also by proper mode of living and following up of better laws of sanitation withstand and avoid infections much successfully

## TRANSMISSION OF INFECTIONS

(1) **Source of infection**—The human being is almost always the source but occassionally animals and insects transmit it Sometimes it may be impossible to detect the primary source as for example the immediate cause of an outbreak of cholera may be detected in polluted water supply yet the human carrier responsible for the infection may not be traced out because what he suffered from might have been only diagnosed as severe diarrhoea though it was actually cholera

(2) **Routes of excretion**—The routes of excretion of the infected discharges and the excreta vary according to the infection and mainly depend upon the site of the disease In diphtheria the sputum nasal discharges and the sputum in pulmonary tuberculosis are generally infectious whereas in enteric fever the stools and sometime the urine contain the bacilli While we cough sneeze laugh and even on loud talking minute **droplets** are expelled out laden with various organisms specially capable of infecting the respiratory tract,

*the human system may find it difficult to eliminate* the organisms totally which although not capable of producing an open frank infection continue to multiply and produce a **carrier state** lasting for days or months or years or may even be life long as in typhoid carriers Convalescent carriers occasionally fail to get rid completely of the infective organism and go on eliminating the bacilli the effects of which he has suffered from

***Intensity of Infection*** *—Generally the following factors* influence the **intensity of an infection** (1) **Pathogenicity** or the ability to produce disease mainly depends upon the species and nature etc of the organism (2) **Infectivity** or the ability to enter a new host and the power to spread rapidly from one host to the other as variola major is capable of high infectivity (3) **Invasiveness** is the ability of the organism after entry into the host to spread inside the body as for example tetanus and diphtheria though are not much invasive act through their soluble extracellular toxins whereas streptococci are usually highly invasive though the invasiveness of individual strain varies (4) **Virulence** is the ability to produce severe illness mostly dependent upon the virulence of the organism specially upon the strain of the organism as the **gravis** strain of the diphtheria bacilli are more virulent than **mitis** strain (5) **Host fastness** is the host parasite relationship even some haemolytic streptococci in carriers may be harmles or dangerous accord ing to whether they are host fast or not (6) **Dosage** or the amount of the infective agent and the velocity at which the infectious material is received by the host are also important factors

**Resistance and factors influencing it** —Though resistance and immunity are more or less synonymous yet the former *has a much broader implication* meaning whole of the defen sive mechanism of the system whereas the latter is used in a narrower term of active fight

**Resistance** may be (1) **innate** because it varies in in dividuals and races (2) **Infantile** Probably this resistance is mostly due to the immunity conferred through the placenta or milk and is usually of one year s duration in the maximum from birth (3) **Acquired** generally results from mild or subliminal or frank infections Once a person suffers from a specific infection the protective substances acquired in the fight tend to persist in the blood and the tissues constituting a permanent form of resistance and hence a second attack is rather uncommon in such persons (4) **Primary and second ary stimuli** The primary stimulus evokes some basal immu nity and thus makes the protective mechanism ready to avoid subsequent infection Secondary stimuli accelerate the response

carefully washing the hands before meals and after examination of patients or after each act of sanitary toilet are hygienic practices tending to minimise the spread of infections

(4) Modes of entry into the human system —These may be due mostly by (a) inhalation (b) ingestion (c) inoculation of the organism With some bacteria such as typhoid bacilli or meningococci the disease will not occur unless they gain entry through the proper route

**I Diseases caused by inhalation —(commoner ones)**

(i) **Bacterial Mostly by local lesions**—e g diphtheria pertussis tuberculosis broncho-pneumonia infectious sore throat scarlet fever (rare amongst coloured people)

(ii) **Mainly bacteraemia**—e g cerebrospinal fever lobar pneumonia in certain percentage

(iii) **Virus infections**—e g small pox chicken pox measles rubella (German measles) mumps epidemic encephalitis common cold influenza infective hepatitis (?) atypical pneumonia partly acute anterior poliomyelitis but the last is probably mainly introduced by nerves of the buccal mucosa etc

(iv) **Unknown or uncertain** —e g infectious enteritis

**II Diseases caused by ingestion**

(i) **Bacterial**—mostly by local infections such as bacillary dysentery tuberculosis of intestine and partly scarlet fever Bovine tuberculous infection through infected cows milk is uncommon in India but is common in Scotland and other countries of Europe

(ii) **Essentially bacteraemia**—e g enteric fever and brucellosis

(iii) Acute poliomyelitis is mainly conveyed through the cranial nerves of the buccal and pharyngeal mucosa Vibrio infection like cholera is a local condition but has rarely and doubtfully been found in other tissues

(iv) **Spirochaetal**—e g Weil s disease

**Parasitic and protozoal**—e g intestinal worms amoebiasis giardiasis etc

**Unknown or uncertain**—e g infectious enteritis

**III Diseases caused by inoculation** —This again may be by (A) direct and (B) indirect where a vector is necessary

A **Direct inoculation**—e g tetanus anthrax glanders wound and surgical infections erysipelas gonorrhoea most of the skin diseases rarely tuberculosis

is understood by the Western mind Evil deeds are not sins we are not offending some Ruler in committing these we are simply injuring ourselves and we must suffer the penalty It is not a sin to put one s finger in the fire but he who does so will surely suffer just as much as if it were All deeds produce certain results and every deed returns to the doer Trinitarianism is an advance on Unitarianism (which is dualism God and man for ever separate) The first step upwards is when we recognise ourselves as the children of God the last step is when we realise ourselves as the One the Atman

V

The question why there cannot be eternal bodies is in itself illogical as body is a term applied to a certain combination of elements changeable and in its very nature impermanent When we are not passing through changes we will not have bodies (so called) Matter beyond the limit of time space and causality will not be matter at all Time and space exist only in us we are the One Permanent Being All forms are transitory that is why all religions say God has no form Menander was a Greco Bactrian king He was converted to Buddhism about 150 B C by one of the Buddhist missionary monks and was called by them Milinda He asked a young monk his teacher Can a perfect man (such as Buddha) be in error or make mistakes? The young monk s answer was The perfect man can remain in ignorance of minor matters not in his experience but he can *never* be in error as to what his insight has actually realised He is perfect here and now He knows the whole mystery the Essence of the universe but he may not know the mere external variations through which that Essence is manifested in time and space He knows the *clay* itself but has not had experience of every

shape it may be wrought into The perfect man knows the Soul itself but not every form and combination of its manifestation He would have to attain more relative knowledge just as we do though on account of his immense power he would learn it far more quickly

The tremendous search light of a perfectly con trolled mind when thrown on any subject would rapidly reduce it to possession It is very important to under stand this because it saves so much foolish explanation as to how a Buddha or a Jesus could be mistaken in ordinary relative knowledge as we well know they were The disciples should not be blamed as having put down the sayings erroneously It is humbug to say that one thing is true and another untrue in their statements Accept the whole account or reject it How can *we* pick out the true from the false?

If a thing happens once it can happen again If any human being has ever realised perfection we too can do so If we cannot become perfect here and now we never can in any state or heaven or condition we may imagine If Jesus Christ was not perfect then the religion bearing his name falls to the ground If he was perfect then we too can become perfect The perfect man does not reason or know as we count knowing for all our knowledge is mere comparison and there is no comparison no classification possible in the Absolute Instinct is less liable to error than rea on but reason is higher and leads to intuition which is higher still Knowledge is the parent of intuition which like instinct is also unerring but on a higher plane There are three grades of manifestation in living beings (1) sub conscious—mechanical unerring (2) conscious—knowing erring (3) super conscious—intuitional unerr ing and these are illustrated in an animal man and God For the man who has become perfect nothing remains but to apply his understanding He lives only

to help the world desiring nothing for himself What distinguishes is negative—the positive is ever wider and wider What we have in common is the widest of all and that is being

Law is a mental shorthand to explain a series of phenomena but law as an entity so to speak does not exist We use the word to express the regular succession of certain occurrences in the phenomenal world We must not let law become a superstition a something inevitable to which we must submit Error must accompany reason but the very struggle to conquer error makes us gods Disease is the struggle of nature to cast out something wrong so sin is the struggle of the divine in us to throw off the animal We must sin (that is make mistakes) in order to rise to Godhood

Do not pity anyone Look upon all as your equals cleanse yourself of the primal sin of inequality We are all equal and must not think I am good and you are bad and I am trying to reclaim you Equality is the sign of the free Jesus came to publicans and sinners and lived with them He never set himself on a pedestal Only sinners see sin See not man see only the Lord We manufacture our own heaven and can make a heaven even in hell Sinners are only to be found in hell and as long as we see them around us we are there ourselves Spirit is not in time nor in space Realise I am Existence Absolute Knowledge Absolute Bliss Absolute—I am He I am He Be glad at birth be glad at death rejoice always in the love of God Get rid of the bondage of body we have become slaves to it and learnt to hug our chains and love our slavery so much so that we long to perpetuate it and go on with body body for ever Do not cling to the idea of body do not look for a future existence in any way like this one do not love or want the body even of those dear to us *This life* is our teacher and

dying only makes room to begin over again Body is our schoolmaster but to commit suicide is folly it is only killing the schoolmaster Another will take his place So until we have learnt to transcend the body we must have it and losing one will get another Still we must not identify ourselves with the body but look upon it only as an instrument to be used in reaching perfection Hanumân the devotee of Râma summed up his philosophy in these words When I identify myself with the body O Lord I am Thy creature eternally separate from Thee When I identify myself with the soul I am a spark of that Divine Fire which Thou art But when I identify myself with the Atman I and Thou art one

Therefore the Jnani strives to realise the Self and nothing else

## VI

Thought is all important for what we think we become There was once a Sannyâsin a holy man who sat under a tree and taught the people He drank milk and ate only fruit and made endless Prânâyâmas and felt himself to be very holy In the same village lived an evil woman Every day the Sannyasin went and warned her that her wickedness would lead her to hell The poor woman unable to change her method of life which was her only means of livelihood was still much moved by the terrible future depicted by the Sannyasin *She wept and prayed to the Lord* begging Him to forgive her because she could not help herself By and by both the holy man and the evil woman died The angels came and bore her to heaven while the demons claimed the soul of the Sannyasin Why is this! he exclaimed have I not lived a most holy life and preached holiness to everybody? Why should I be taken to hell while this wicked woman is taken to heaven? Because answered the demons while she

was forced to commit unholy acts her mind was always fixed on the Lord and she sought deliverance which has now come to her But you on the contrary while you performed only holy acts had your mind always fixed on the wickedness of others You saw only sin and thought only of sin so now you have to go to that place where only sin is The moral of the story is obvious The outer life avails little The heart must be pure and the pure heart sees only good never evil We should never try to be guardians of mankind or to stand on a pedestal as saints reforming sinners Let us rather purify ourselves and the result must be that in so doing we shall help others

Physics is bounded on both sides by metaphysics So it is with reason—it starts from non reason and ends with non reason If we push inquiry far enough in the world of perception we must reach a plane beyond perception Reason is really stored up and classified perception preserved by memory We can never imagine or reason beyond our sense perceptions Nothing beyond reason can be an object of sense knowledge We feel the limited character of reason yet it does bring us to a plane where we get a glimpse of something beyond The question then arises Has man an instrument that transcends reason? It is very probable that in man there is a power to reach beyond reason in fact the saints in all ages assert the existence of this power in them selves But it is impossible in the very nature of things to translate spiritual ideas and perceptions into the lan guage of reason and these saints each and all have declared their inability to make known their spiritual experiences Language can of course supply no words for them so that it can only be asserted that these are actual experiences and can be had by all Only in that way can they become known but they can never be described Religion is the science which learns the

transcendental in nature through the transcendental in man We know as yet but little of man consequently but little of the universe When we know more of man we shall probably know more of the universe Man is the epitome of all things and all knowledge is in him Only for that infinitesimal portion of the universe which comes into sense perception are we able to find a reason never can we give the reason for any fundamental principle Giving a reason for a thing is simply to classify it and put it in a pigeon hole of the mind When we meet a new fact we at once strive to put it in some existing category and the attempt to do this is to reason When we succeed in placing the fact it gives a certain amount of satisfaction but we can never go beyond the physical plane in this classification That man can transcend the limits of the senses is the emphatic testimony of all past ages The Upanishads told 5 000 years ago that the realisation of God could never be had through the senses So far modern agnosticism agrees but the Vedas go further than the negative side and assert in the plainest terms that man can and does transcend this sense bound frozen universe He can as it were find a hole in the ice through which he can pass and reach the whole ocean of life Only by so transcending the world of sense can he reach his true Self and realise what he really is

Jnâna is never sense knowledge We cannot *know* Brahman but we *are* Brahman the whole of It not a *piece* The unextended can never be divided The apparent variety is but the reflection seen in time and space as we see the sun reflected in a million dew drops though we know that the sun itself is one and not many In Jnana we have to lose sight of the variety and see only the Unity Here there is no subject no object no knowing no thou or he or I only the one

absolute Unity We *are* this all the time once free ever free Man is *not* bound by the law of causation Pain and misery are not in man they are but as the passing cloud throwing its shadow over the sun but the cloud passes the sun is unchanged and so it is with man He is not born he does not die he is not in time and space These ideas are mere reflections of the mind but we mistake them for the reality and so lose sight of the glorious truth they obscure Time is but the method of our thinking but we are the eternally present tense Good and evil have existence only in relation to us One cannot be had without the other because neither has meaning or existence apart from the other As long as we recognise duality or separate God and man so long we must see good and evil Only by going to the centre by unifying ourselves with God can we escape the delusions of the senses When we let go the eternal fever of desire the endless thirst that gives us no rest when we have for ever quenched desire we shall escape both good and evil because we shall have tanscended both The satisfaction of desire only increases it as oil poured on fire but makes it burn more fiercely The farther from the centre the faster goes the wheel the less the rest Draw near the centre check desire stamp it out let the false self go then our vision will clear and we shall see God Only through renunciation of this life and of all life to come (heaven etc) can we reach the point where we stand firmly on the true Self While we hope for anything desire still rules us Be for one moment really hopeless and the mist will clear For what to hope when one is the all of existence? The secret of Jnana is to give up all and be sufficient unto ourselves Say not and you become not say is and you become is Worship the Self within naught else exists all that binds us is Mayâ—delusion

## VII

The Self is the condition of all in the universe but It can never be conditioned As soon as we know that we are It we are free As mortals we are not and never can be free Free mortality is a contradiction in terms for mortality implies change and only the change less can be free The Atman alone is free and that is our real essence We feel this inner freedom in spite of all theories all beliefs we know it and every action proves that we know it The will is not free its apparent freedom is but a reflection from the Real If the world were only an endless chain of cause and effect where could one stand to help it? There must needs be a piece of dry land for the rescuer to stand on else how can he drag anyone out of the rushing stream and save him from drowning? Even the fanatic who cries I am a worm thinks that he is on the way to become a saint He sees the saint even in the worm

There are two ends or aims of human life real knowing (Vijnâna) and bliss Without freedom these two are impossible They are the touchstone of all life We should feel the Eternal Unity so much that we should weep for all sinners knowing that it is *we* who are sinning The eternal law is self sacrifice not self assertion What self to assert when all is One? There are no rights all is love The great truths that Jesus taught have never been lived Let us try his method and see if the world will not be saved The contrary method has nearly destroyed it Selflessness only not selfishness can solve the question The idea of right is a limitation there is really no mine and thine for I am thou and thou art I We have responsibility not rights We should say I am the universe not I am John or I am Mary These limitations are all delusions and are what holds us in bondage for as soon as I think I am John I want exclusive posses

sion of certain things and begin to say me and mine and continually make new distinctions in so doing So our bondage goes on increasing with every fresh distinction and we get farther and farther away from the central Unity the undivided Infinite There is only one Individual and each of us is That Oneness alone is love and fearlessness separation leads us to hatred and fear Oneness fulfils the law Here on earth we strive to enclose little spaces and exclude outsiders but we cannot do that in the sky though that is what sectarian religion tries to do when it says Only *this* way leads to salvation all others are wrong Our aim should be to wipe out these little enclosures to widen the boundaries until they are lost sight of and to realise that all religions lead to God This little puny self must be sacrificed This is the truth symbolised by baptism into a new life the death of the old man the birth of the new—the perishing of the false self the realisation of the Atman the one Self of the universe

The two great divisions of the Vedas are Karma Kânda—the portion pertaining to doing or work and Jnâna Kânda—the portion treating of knowing true knowledge In the Vedas we can find the whole process of the growth of religious ideas This is because when a higher truth was reached the lower perception that led to it was still preserved This was done because the sages realised that the world of creation being eternal there would always be those who needed the first steps to knowledge that the highest philosophy while open to all could never be grasped by all In nearly every other religion only the last or highest realisation of truth has been preserved with the natural consequence that the older ideas were lost while the newer ones were only understood by the few and gradually came to have no meaning for the many We see this result illustrated in the growing revolt against old traditions and authorities

Instead of accepting them the man of today boldly challenges them to give reasons for their claims to make clear the grounds upon which they demand acceptance Much in Christianity is the mere application of new names and meanings to old pagan beliefs and customs If the old sources had been preserved and the reasons for the transitions fully explained many things would have been clearer The Vedas preserved the old ideas and this fact necessitated huge commentaries to explain them and why they were kept It also led to many superstitions through clinging to old forms after all sense of their meaning had been lost In many ceremonials words are repeated which have survived from a now forgotten language and to which no real meaning can now be attached The idea of evolution was to be found in the Vedas long before the Christian era but until Darwin said it was true it was regarded as a mere Hindu superstition

All external forms of prayer and worship are included in the Karma Kanda These are good when performed in a spirit of unselfishness and not allowed to degenerate into mere formality They purify the heart The Karma Yogi wants everyone to be saved before himself His only salvation is to help others to salvation To serve Krishna s servants is the highest worship One great saint prayed Let me go to hell with the sins of the whole world but let the world be saved This true worship leads to intense self sacrifice It is told of one sage that he was willing to give all his virtues to his dog that it might go to heaven because it had long been faithful to him while he himself was content to go to hell

The Jnana Kanda teaches that knowledge alone can save in other words that he must become wise unto salvation Knowledge is first objective the Knower knowing Himself The Self the only subject

is in manifestation seeking only to know Itself The better the mirror the better reflection it can give so man is the best mirror and the purer the man the more clearly he can reflect God Man makes the mistake of separating himself from God and identifying himself with the body This mistake arises through Mâyâ which is not exactly delusion but might be said to be seeing the real as something else and not as it is This identifying of ourselves with the body leads to inequality which inevitably leads to struggle and jealousy and so long as we see inequality we can never know happiness Igno rance and inequality are the two sources of all misery says Jnana

When man has been sufficiently buffeted by the world he awakes to a desire for freedom and searching for means of escape from the dreary round of earthly existence he seeks knowledge learns what he really is and is free After that he looks at the world as a huge machine but takes good care to keep his fingers out of the wheels Duty ceases for him who is free what power can constrain the free being? He does good because it is his nature not because any fancied duty commands it This does not apply to those who are still in the bondage of the senses Only for him who has transcended the lower self is this freedom He stands on his own soul obeys no law he is free and perfect He has undone the old superstitions and got out of the wheel Nature is but the mirror of our own selves There is a limit to the working power of human beings but no limit to desire so we strive to get hold of the working powers of others and enjoy the fruits of their labours escaping work our selves Inventing machinery to work for us can never increase well being for in gratifying desire we only find it and then we want more and more without end Dying still filled with ungratified desires we have to be born again and again in the vain search for satisfaction

Eight millions of bodies have we had before we reached the human say the Hindus Jnana says Kill desire and so get rid of it That is the only way Cast out all causation and realise the Atman Only freedom can produce true morality If there were only an endless chain of cause and effect Nirvâna could not be It is extinction of the seeming self bound by this chain That is what constitutes freedom to get beyond causality

Our true nature is good it is free the pure being that can never be or do wrong When we read God with our eyes and minds we call Him this or that but in reality there is but One all variations are our interpretations of that One We *become* nothing we *regain* our true Self Buddha s summary of misery as the outcome of ignorance and caste (inequality) has been adopted by the Vedantists because it is the best ever made It manifests the wonderful insight of this greatest among men Let us then be brave and sincere whatever path we follow with devotion must take us to freedom Once lay hold of one link of the chain and the whole must come after it by degrees Water the root of the tree and the whole tree is watered It is of little advantage to waste time to water each leaf In other words seek the Lord and getting Him we get all Churches doctrines forms—these are merely the hedges to protect the tender plant of religion but later on they must all be broken down that the little plant may become a tree So the various religious sects Bibles Vedas and scriptures are just tubs for the little plant but it has to get out of the tub and fill the world

We must learn to feel ourselves as much in the sun in the stars as here Spirit is beyond all time and space every eye seeing is my eye every mouth praising the Lord is my mouth every sinner is I We are confined nowhere we are not body The universe is our body We are just the pure crystal reflecting all but itself

ever the same We are magicians waving magic wands and creating scenes before us at will but we have to go behind appearances and know the Self This world is like water in a kettle beginning to boil first a bubble comes then another then many until all is in ebullition and passes away in steam The great teachers are like the bubbles as they begin—here one there one but in the end every creature has to be a bubble and escape Creation ever new will bring new water and go through the process all over again Buddha and Christ are the two greatest bubbles the world has known They were great souls who having realised freedom helped others to escape Neither was perfect but they are to be judged by their virtues never by their defects Jesus fell short because he did not always live up to his own highest ideal and above all because he did not give woman an equal place with man Woman did everything for him yet not one was made an apostle This was doubtless owing to his Semitic origin The great Aryans Buddha among the rest have always put woman in an equal position with man *For them sex in religion did not exist* In the Vedas and Upanishads woman taught the highest truths and received the same veneration as men

VIII

Both happiness and misery are chains the one golden the other iron but both are equally strong to bind us and hold us back from realising our true nature The Atman knows neither happiness nor misery These are merely states and states must ever change The nature of the soul is bliss and peace unchanging We have not to *get* it we *have* it let us wash away the dross from our eyes and see it We must stand ever on the Self and look with perfect calmness upon all the panorama of the world It is but baby s play and ought never to disturb us If the mind is pleased by praise

it will be pained by blame All pleasures of the senses or even of the mind are evanescent but within ourselves is the one true unrelated pleasure dependent on nothing outside The pleasure of the Self is what the world calls religion The more our bliss is within the more spiritual we are Let us not depend upon the world for pleasure

Some poor fishwives overtaken by a violent storm found refuge in the garden of a rich man He received them kindly fed them and left them to rest in a summer house surrounded by exquisite flowers which filled all the air with their rich perfume The women lay down in this sweet smelling paradise but could not sleep They missed something out of their lives and could not be happy without it At last one of the women arose and went to the place where they had left their fish baskets brought them to the summer house and then once more happy in the familiar smell they were all soon sound asleep

Let not the world be our fish basket which we have to depend upon for enjoyment This is Tâmasika or being bound by the lowest of the three qualities (or Gunas) Next higher come the egotistical who talk always about I I Sometimes they do good work and may become spiritual These are Râjasika or active Highest come the introspective nature (Sâttvika) those who live only in the Self These three qualities are in every human being in varying proportions and different ones predominate at different times We must strive to overcome Tamas with Rajas and then to submerge both in Sattva

Creation is not a making of something it is the struggle to regain equilibrium as when atoms of cork are thrown to the bottom of a pail of water they rush to the top singly and in clusters and when all have reached the top and equilibrium has been regained all

motion or life ceases So with creation if equilibrium were reached all change would cease and life so called would end Life must be accompanied with evil for when the balance is regained the world must end as *sameness and destruction are one* There is no possibility of ever having pleasure without pain or good without evil for living itself is just the lost equilibrium What we want is freedom not life nor pleasure nor good Creation is eternal without beginning without end the ever moving ripple in an infinite lake There are yet unreached depths and others where stillness has been regained but the ripple is ever progressing the struggle to regain the balance is eternal Life and death are but different names for the same fact they are the two sides of one coin Both are Mâyâ the inexplicable state of striving at one point to live and a moment later to die Beyond all this is the true nature the Atman We enter into creation and then for us it becomes living Things are dead in themselves only we give them life and then like fools we turn round and are afraid of them or enjoy them! The world is neither true nor untrue it is the shadow of truth

Imagination is the gilded shadow of truth says the poet The internal universe the Real is infinitely greater than the external one which is but the shadowy projection of the true one When we see the rope we do not see the serpent and when the serpent is the rope is not Both cannot exist at the same time so while we see the world we do not realise the Self it is only an intellectual concept In the realisation of Brahman the personal I and all sense of the world is lost The Light does not know the darkness because it has no existence in the light so Brahman is all While we recognise a God it is really only the Self that we have separated from ourselves and worship as outside of us but all the time it is our own true Self the one

and only God The nature of the brute is to remain where he is of man to seek good and avoid evil of God to neither seek nor avoid but just to be blissful eternally Let us be Gods let us make our hearts like an ocean to go beyond all the trifles of the world and see it only as a picture We can then enjoy it without being in any way affected by it Why look for good in the world what can we find there? The best it has to offer is only as if children playing in a mud puddle found a few glass beads They lose them again and have to begin the search anew Infinite strength is religion and God We are only souls if we are free there is immortality only if we are free there is God only if He is free

Until we give up the world manufactured by the ego never can we enter the Kingdom of Heaven None ever did none ever will To give up the world is to utterly forget the ego to know it not at all living in the body but not being ruled by it This rascal ego must be obliterated Power to help mankind is with the silent ones who only live and love and withdraw their own personality entirely They never say me or mine they are only blessed in being the instruments to help others They are wholly identified with God asking nothing and not *consciously* doing anything They are the true Jivanmuktas—the absolutely selfless their little personality thoroughly blown away ambition non existent They are all principle with no personality The more we sink the little self the more God comes Let us get rid of the little I and let only the great I live in us Our best work and our greatest influence is when we are without a thought of self It is the desireless who bring great results to pass Bless men when they revile you Think how much good they are doing by helping to stamp out the false ego Hold fast to the real Self think only pure thoughts and you will

accomplish more than a regiment of mere preachers Out of purity and silence comes the word of power

## IX

Expression is necessarily degeneration because spirit can only be expressed by the letter and as St Paul said the letter killeth Life cannot be in the letter which is only a reflection Yet principle must be clothed in matter to be known We lose sight of the Real in the covering and come to consider that as the Real instead of as the symbol This is an almost universal mistake Every great Teacher knows this and tries to guard against it but humanity in general is prone to worship the *seen* rather than the unseen This is why a succession of prophets have come to the world to point again and again to the principle behind the personality and to give it a new covering suited to the times Truth remains ever unchanged but *it* can *only* be presented in a form so from time to time a new form or expression is given to Truth as the progress of mankind makes them ready to receive it When we free ourselves from name and form especially when we no longer need a body of any kind good or bad coarse or fine then only do we escape from bondage Eternal progression would be eternal bondage We must get beyond all differentiation and reach eternal sameness or homogeneity or Brahman The Atman is the unity of all personalities and is unchangeable the One with out a second It is not *life* but it is coined into *life* It is beyond life and death and good and bad It is the Absolute Unity Dare to seek Truth even through hell Freedom can never be true of name and form of the related No form can say I am free as a form Not until all idea of form is lost does freedom come If our freedom hurts others we are not free there We must not *hurt others While real perception is only one*

relative perceptions must be many The fountain of all knowledge is in every one of us—in the ant as in the highest angel Real religion is one all quarrel is with the forms the symbols the illustrations The millennium exists already for those who find it The truth is we have lost ourselves and think the world to be lost

Fool! Hearest not thou? In thine own heart day and night is singing that Eternal Music—Sachchidânanda Soham Soham (Existence Knowledge and Bliss I am He I am He)!

To try to think without a phantasm is to try to make the impossible possible Each thought has two parts—the thinking and the word and we must have both Neither idealists nor materialists are able to explain the world to do that we must take both idea and expres sion All knowledge is of the reflected as we can only see our own faces reflected in a mirror So no one can know his Self or Brahman but each is that Self and must see it reflected in order to make it an object of knowledge This seeing the illustrations of the unseen Principle is what leads to idolatry—so called The range of idols is wider than is usually supposed They range from wood and stone to great personalities as Jesus or Buddha The introduction of idols into India was he result of Buddha s constantly inveighing against a Per sonal God The Vedas knew them not but the reaction against the loss of God as Creator and Friend led to making idols of the great teachers and Buddha himself became an idol and is worshipped as such by millions of people Violent attempts at reform always end in retarding true reform To worship is inherent in every man s nature only the highest philosophy can rise to pure abstraction So man will ever personify his God in order to worship Him This is very good as long as the symbol be it what it may is worshipped as a symbol of the Divinity behind and not in and for itself Above

all we need to free ourselves from the superstition of believing because it is in the books To try to make everything—science religion philosophy and all—con form to what any book says is a most horrible tyranny Book worship is the worst form of idolatry There was once a stag proud and free and he talked in a lordly fashion to his child Look at me see my powerful horns! With one thrust I can kill a man it is a fine thing to be a stag! Just then the sound of the huntsman s bugle was heard in the distance and the stag precipitately fled followed by his wondering child When they had reached a place of safety he enquired Why do you fly before man O my father when you are so strong and brave? The stag answered *My child I know* I am strong and powerful but when I hear that sound something seizes me and makes me flee whether I will or no So with us We hear the bugle sound of the laws laid down in the books habits and old super stitions lay hold of us and before we know it we are fast bound and forget our real nature which is freedom

Knowledge exists eternally The man who discovers a spiritual truth is what we call inspired and what he brings to the world is revelation But revelation too is eternal and is not to be crystallised as final and then blindly followed Revelation may come to any man who has fitted himself to receive it Perfect purity is the most essential thing for only the pure in heart shall see God Man is the highest being that exists and this is the greatest world for here can man realise freedom The highest concept we can have of God is man Every attribute we give Him belongs also to man only in a lesser degree When we rise higher and want to get out of this concept of God we have to get out of the body out of mind and imagination and leave this world out of sight When we rise to be the Absolute we are no longer in the world all is Subject without object

Man is the apex of the only world we can ever know Those who have attained sameness or perfection are said to be living in God All hatred is killing the self by the self therefore love is the law of life To rise to this is to be perfect but the more perfect we are the less work can we do The Sâttvika see and know that all this world is mere child s play and do not trouble themselves about that We are not much disturbed when we see two puppies fighting and biting each other We know it is not a serious matter The perfect one knows that this world is Mâyâ Life is called Samsâra—it is the result of the conflicting forces acting upon us Materialism says The voice of freedom is a delusion Idealism says The voice that tells of bondage is but a dream Vedanta says We are free and not free at the same time That means that we are never free on the earthly plane but ever free on the spiritual side The Self is beyond both freedom and bondage We *are* Brahman we *are* immortal knowledge beyond the senses we *are* bliss absolute

We have to go beyond sense limit and transcend even reason and we have the power to do this

*[After practising the first lesson in breathing a week the pupil reports to the teacher ]*

## FIRST LESSON

This is a lesson seeking to bring out the individuality Each individuality must be cultivated All will meet at the centre Imagination is the door to inspiration and the basis of all thought All prophets poets and discoverers have had great imaginative power The explanation of nature is in us the stone falls outside but gravitation is in us not outside Those who stuff themselves those who starve themselves those who sleep too much those who sleep too little cannot become Yogis Ignorance fickleness jealousy laziness and excessive attachment are the great enemies to success in Yoga practice The three great requisites are

First Purity physical and mental all uncleanness all that would draw the mind down must be abandoned

Second Patience At first there will be wonderful manifestations but they will all cease This is the hardest period but hold fast in the end the gain is sure if you have patience

Third Perseverance Persevere through thick and thin through health and sickness never miss a day in practice

The best time for practice is the junction of day and night the calmest time in the tides of our bodies the zero point between two states If this cannot be done practise upon rising and going to bed Great personal cleanliness is necessary—a daily bath

After bathing sit down and hold the seat firm that

is imagine that you sit as firm as a rock that nothing can move you Hold the head and shoulders and the hips in a straight line keeping the spinal column free all action is along it and it must not be impaired

Begin with your toes and think of each part of your body as perfect picture it so in your mind touching each part if you prefer to do so Pass upward bit by bit until you reach the head thinking of each as perfect lacking nothing Then think of the whole as perfect an instrument given to you by God to enable you to attain Truth the vessel in which you are to cross the ocean and reach the shores of eternal truth When this has been done take a long breath through both nostrils throw it out again and then hold it out as long as you comfortably can Take four such breaths then breathe naturally and pray for illumination

I meditate on the glory of that being who created this universe may he illuminate my mind Sit and meditate on this ten or fifteen minutes

Tell your experiences to no one but your Guru

Talk as little as possible

Keep your thoughts on virtue what we think we tend to become

Holy meditation helps to burn out all mental impurities All who are not Yogis are slaves bond after bond must be broken to make us free

All can find the reality beyond If God is true we must feel him as a fact and if there is a soul we ought to be able to see it and feel it

The only way to find if there be a soul is to be something which is not the body

The Yogis class our organs under two chief heads organs of sense and organs of motion or knowledge and action

The internal organ or mind has four aspects First—Manas the cogitating or thinking faculty which is usually

almost entirely wasted because uncontrolled properly governed it is a wonderful power Second—Buddhi the will (sometimes called the intellect) Third—Ahamkâra the self conscious egotism (from Aham) Fourth—Chitta the substance in and through which all the faculties act the floor of the mind as it were or the sea in which the various faculties are waves

Yoga is the science by which we stop Chitta from assuming or becoming transformed into several faculties As the reflection of the moon on the sea is broken or blurred by the waves so is the reflection of the Atman the true Self broken by the mental waves Only when the sea is stilled to mirror like calmness can the reflection of the moon be seen and only when the mind stuff the Chitta is controlled to absolute calmness is the Self to be recognised

The mind is not the body though it is matter in a finer form It is not eternally bound by the body This is proved as we get occasionally loosened from it We can learn to do this at will by controlling the senses

When we can do that fully we shall control the universe because our world is only what the senses bring us Freedom is the test of the higher being Spiritual life begins when you have loosened yourself from the control of the senses He whose senses rule him is worldly—is a slave

If we could entirely stop our mind stuff from breaking into waves it would put an end to our bodies For millions of years we have worked so hard to manufacture these bodies that in the struggle we have forgotten our real purpose in getting them which was to become perfect We have grown to think that body making is the end of our efforts This is Mâyâ We must break this delusion and return to our original aim and realise we are not the body it is our servant

Learn to take the mind out and to see that it is

separate from the body We endow the body with sensation and life and then think it is alive and real We have worn it so long that we forget that it is not identical with us Yoga is to help us put off our body when we please and see it as our servant our instrument *not* our ruler Controlling the mental powers is the first great aim in Yoga practices The second is concentrating them in full force upon any subject

You cannot be a Yogi if you talk much

## SECOND LESSON

This Yoga is known as the eightfold Yoga because it is divided into eight principal parts These are

First—Yama This is most important and has to govern the whole life it has five divisions

1st Not injuring any being by thought word or deed

2nd Non covetousness in thought word or deed

3rd Perfect chastity in thought word or deed

4th Perfect truthfulness in thought word or deed

5th Non receiving of gifts

Second—Niyama The bodily care bathing daily dietary etc

Third—Âsana Posture Hips shoulders and head must be held straight leaving the spine free

Fourth—Prânâyâma Restraining the breath (in order to get control of the Prâna or vital force)

Fifth—Pratyâhâra Turning the mind inward and restraining it from going outward revolving the matter in the mind in order to understand it

Sixth—Dhâranâ Concentration on one subject

Seventh—Dhyâna Meditation

Eighth—Samâdhi Illumination the aim of all our efforts

Yama and Niyama are for lifelong practice as for the others we do as the leech does not leave one blade of grass before firmly grasping another In other words we have thoroughly to understand and practise one step before taking another

The subject of this lesson is Pranayama or controlling the Prana In Raja Yoga breathing enters the psychic plane and brings us to the spiritual It is the fly wheel of the whole bodily system It acts first upon the lungs the lungs act on the heart the heart acts upon the circulation this in turn upon the brain and the brain upon the mind The will can produce an outside sensation and the outside sensation can arouse the will Our wills are weak we do not realise their power we are so much bound up in matter Most of our action is from outside in Outside nature throws us off our balance and we cannot (as we ought) throw nature off her balance This is all wrong the stronger power is really within

The great saints and teachers were those who had conquered this world of thought within themselves and so spake with power The story[1] of the minister confined in a high tower who was released through the efforts of his wife who brought him a beetle honey a silken thread a cord and a rope illustrates the way we gain control of our mind by using first the physical regulation of the breath as the silken thread That enables us to lay hold of one power after another until the rope of concentration delivers us from the prison of the body and we are free Reaching freedom we can discard the means used to bring us there

Pranayama has three parts

1st Puraka—inhaling

2nd Kumbhaka—restraining

3rd Rechaka—exhaling

[1] For the story see *The Complete Works of Swami Vivekananda* Vol I p 143

There are two currents passing through the brain and circulating down the sides of the spine crossing at the base and returning to the brain One of these currents called the sun (Pingala) starts from the left hemisphere of the brain crosses at the base of the brain to the right side of the spine and recrosses at the base of the spine like one half of the figure eight

The other current the moon (Ida) reverses this action and completes this figure eight Of course the lower part is much longer than the upper These currents flow day and night and make deposits of the great life forces at different points commonly known as plexuses but we are rarely conscious of them By concentration we can learn to feel them and trace them over all parts of the body These sun and moon currents are intimately connected with breathing and by regulating this we get control of the body

In the Katha Upanishad the body is described as the chariot the mind is the reins the intellect is the charioteer the senses are the horses and the objects of the senses their road The self is the rider seated in the chariot Unless the rider has understanding and can make the charioteer control his horses he can never attain the goal but the senses like vicious steeds will drag him where they please and may even destroy him These two currents are the great check rein in the hands of the charioteer and he must get control of this to control the horses We have to get the power to become moral until we do that we cannot control our actions Yoga alone enables us to carry into practice the teachings of morality To become moral is the object of Yoga All great teachers were Yogis and controlled every current The Yogis arrest these currents at the base of the spine and force them through the centre of the spinal column They then become the current of knowledge which only exists in the Yogi

Second Lesson in Breathing One method is not for all This breathing must be done with rhythmic regularity and the easiest way is by counting as that is purely mechanical we repeat the sacred word Om a certain number of times instead

The process of Pranayama is as follows Close the right nostril with the thumb and then slowly inhale through the left nostril repeating the word Om four times

Then firmly close both nostrils by placing the fore finger on the left one and hold the breath in mentally repeating Om eight times

Then removing the thumb from the right nostril exhale slowly through that repeating Om four times

As you close the exhalation draw in the abdomen *forcibly to expel all the air from the lungs* Then slowly inhale through the right nostril keeping the left one closed repeating Om four times Next close the right nostril with the thumb and hold the breath while repeating Om eight times Then unclose the left nostril and slowly exhale repeating Om four times drawing in the abdomen as before Repeat this whole operation twice at each sitting that is making four Pranayamas two for each nostril Before taking your seat it is well to begin with prayer

This needs to be practised a week then gradually increase the duration of breathings keeping the same ratio that is if you repeat Om six times at inhalation then do the same at exhalation and twelve times during Kumbhaka These exercises will make us more spiritual more pure more holy Do not be led aside into any byways or seek after power *Love is the only power* that stays by us and increases He who seeks to come to God through Raja Yoga must be strong mentally physically morally and spiritually Take every step in that light

Of hundreds of thousands only one soul will say I will go beyond and I will penetrate to God Few can face the truth but to accomplish anything we must be willing to die for Truth

## THIRD LESSON

Kundalini Realise the soul not as matter but as it is We are thinking of the soul as body but we must separate it from sense and thought Then alone can we know we are immortal Change implies the duality of cause and effect and all that changes must be mortal This proves that the body cannot be immortal nor can the mind because both are constantly changing Only the unchangeable can be immortal because there is nothing to act upon it

We do not become it we are it but we have to clear away the veil of ignorance that hides the truth from us The body is objectified thought The sun and moon currents bring energy to all parts of the body The surplus energy is stored at certain points (plexuses) along the spinal column commonly known as nerve centres

These currents are not to be found in dead bodies and can only be traced in a healthy organism

The Yogi has an advantage for he is able not only to feel them but actually to see them They are luminous in his life and so are the great nerve centres

There is conscious as well as unconscious action The Yogis possess a third kind the super conscious which in all countries and in all ages has been the source of all *religious knowledge* *The super conscious state makes no* mistakes but whereas the action of the instinct would be purely mechanical the former is beyond consciousness

It has been called inspiration but the Yogi says This faculty is in every human being and eventually all will enjoy it

We must give a new direction to the sun and moon currents and open for them a new passage through the centre of the spinal cord When we succeed in bringing the currents through this passage called Sushumnâ up to the brain we are for the time being separated entirely from the body

The nerve centre at the base of the spine near the sacrum is most important It is the seat of the generative substance of the sexual energy and is symbolised by the Yogi as a triangle containing a tiny serpent coiled up in it This sleeping serpent is called Kundalini and to raise this Kundalini is the whole object of Raja Yoga

The great sexual force raised from animal action and sent upward to the great dynamo of the human system the brain and there stored up becomes Ojas or spiritual force All good thought all prayer resolves a part of that animal energy into Ojas and helps to give us spiritual power This Ojas is the real man and in human beings alone is it possible for this storage of Ojas to be accomplished One in whom the whole animal sex force has been transformed into Ojas is a god He speaks with power and his words regenerate the world

The Yogi pictures this serpent as being slowly lifted from stage to stage until the highest the pineal gland is reached No man or woman can be really spiritual until the sexual energy the highest power possessed by man has been converted into Ojas

*No force can be created it can only be directed* Therefore we must learn to control the grand powers that are already in our hands and by will power make them spiritual instead of merely animal Thus it is clearly seen that chastity is the corner stone of all morality and of all religion In Raja Yoga especially absolute chastity

in thought word and deed is a *sine qua non* The same laws apply to the married and the single If one wastes the most potent forces of one s being one cannot become spiritual

All history teaches us that the great seers of all ages were either monks and ascetics or those who had given up married life only the pure in life can see God

Just before making the Prânâyâma endeavour to visualise the triangle Close your eyes and picture it vividly in your imagination See it surrounded by flames and with the serpent coiled in the middle When you can clearly see the Kundalini place it in imagination at the base of the spine and when restraining the breath in Kumbhaka throw it forcibly down on the head of the serpent to awaken it The more powerful the imagination the more quickly will the real result be attained and the Kundalini be awakened Until it does imagine it does try to feel the currents and try to force them through the Sushumna This hastens their action

## FOURTH LESSON

Before we can control the mind we must study it

We have to seize this unstable mind and drag it from its wanderings and fix it on one idea Over and over again this must be done By power of will we must get hold of the mind and make it stop and reflect upon the glory of God

The easiest way to get hold of the mind is to sit quiet and let it drift where it will for a while Hold fast to the idea I am the witness watching my mind drifting The mind is not I Then see it think as if it were a thing entirely apart from yourself Identify your self with God never with matter or with the mind

Picture the mind as a calm lake stretched before you and the thoughts that come and go as bubbles rising and breaking on its surface Make no effort to control the thoughts but watch them and follow them in imagination as they float away This will gradually lessen the circles For the mind ranges over wide circles of thought and those circles widen out into ever increasing circles as in a pond when we throw a stone into it We want to reverse the process and starting with a huge circle make it narrower until at last we can fix the mind on one point and make it stay there Hold to the idea I am not the mind I see that I am thinking I am watching my mind act and each day the identification of yourself with thought and feeling will grow less until at last you can entirely separate yourself from the mind and actually know it to be apart from yourself

When this is done the mind is your servant to control as you will The first stage of being a Yogi is to go beyond the senses When the mind is conquered he has reached the highest stage

Live alone as much as possible The seat should be of comfortable height put first a grass mat then a skin (fur) next a silken cover It is better that the seat has no back and it must stand firm

Thoughts being pictures we should not create them We have to exclude all thought from the mind and make it a blank as fast as a thought comes we have to banish it To be able to accomplish this we must transcend matter and go beyond our body The whole life of man is really an effort to do this

Each sound has its own meaning In our nature these two things are connected

The highest ideal we have is God Meditate on Him We cannot know the Knower but we are He

Seeing evil we are creating it What we are we see outside for the world is our mirror This little body

is a little mirror we have created but the whole universe is our body We must think this all the time then we shall know that we cannot die or hurt another because he is our own We are birthless and deathless and we ought only to love

This whole universe is my body all health all happiness is mine because all is in the universe Say I am the universe We finally learn that all action is from us to the mirror

Although we appear as little waves the whole sea is at our back and we are one with it No wave can exist of itself

Imagination properly employed is our greatest friend it goes beyond reason and is the only light that takes us everywhere

Inspiration is from within and we have to inspire ourselves by our own higher faculties

## FIFTH LESSON

Pratyâhâra and Dhâranâ Krishna says All who seek me by whatever means will reach me All must reach me Pratyahara is a gathering toward an attempt to get hold of the mind and focus it on the desired object The first s ep is to let the mind drift watch it see what it thinks be only the witness Mind is not soul or spirit It is only matter in a finer form and we own it and can learn to manipulate it through the nerve energies

The body is the objective view of what we call mind (subjective) We the Self are beyond both body and mind we are Atman the eternal unchangeable witness The body is crystallised thought

When the breath is flowing through the left nostril it is the time for rest when through the right for work and when through both the time to meditate When we are calm and breathing equally through both nostrils we are in the right condition for quiet meditation It is no use trying to concentrate at first Control of thought will come of itself

After sufficient practice of closing the nostrils with the thumb and forefinger we shall be able to do it by the power of will through thought alone

Prânâyâma is now to be slightly changed If the student has the name of his Ishta (Chosen Ideal) he should use that instead of Om during inhalation and exhalation and use the word Hum (pronounced Hoom) during Kumbhaka

Throw the restrained breath forcibly down on the head of the Kundalini at each repetition of the word Hum and imagine that this awakens her Identify your self only with God After a while thoughts will announce their coming and we shall learn the way they begin and be aware of what we are going to think just as on this plane we can look out and see a person coming This stage is reached when we have learned to separate ourselves from our minds and see ourselves as one and thought as something apart Do not let the thoughts grasp you stand aside and they will die away

Follow these holy thoughts go with them and when they melt away you will find the feet of the Omni potent God This is the super conscious state when the idea melts follow it and melt with it

Haloes are symbols of inner light and can be seen by the Yogi Sometimes we may see a face as if sur rounded by flames and in them read the character and judge without erring We may have our Ishta come to us as a vision and this symbol will be the one upon which we can rest easily and fully concentrate our minds

We can imagine through all the senses but we do so mostly through the eyes Even imagination is half material In other words we cannot think without a phantasm But since animals appear to think yet have no words it is probable that there is no inseparable connection between thought and images

Try to keep up the imagination in Yoga being careful to keep it pure and holy We all have our peculiarities in the way of imaginative power follow the way most natural to you it will be the easiest

We are the results of all reincarnations through Karma One lamp lighted from another says the Buddhist—different lamps but the same light

Be cheerful be brave bathe daily have patience purity and perseverance then you will become a Yogi in truth Never try to hurry and if the higher powers come remember that they are but side paths Do not let them tempt you from the main road put them aside and hold fast to your only true aim—God Seek only the Eternal finding which we are at rest for ever having the all nothing is left to strive for and we are for ever in free and perfect existence—Existence absolute Knowl edge absolute Bliss absolute

## SIXTH LESSON

Sushumnâ It is very useful to meditate on the Su humna You may have a vision of it come to you and this is the best way Then meditate for a long time on that It is a very fine very brilliant thread this living passage through the spinal cord this way of salvation through which we have to make the Kundalini rise

In the language of the Yogi the Sushumna has its ends in two lotuses the lower lotus surrounding the triangle of the Kundalini and the top one in the brain surrounding the pineal gland between these two are four other lotuses stages on the way

6th Pineal Gland
5th Between the Eyes
4th Bottom of the Throat
3rd Level with the Heart
2nd Opposite the Navel
1st Base of Spine

We must awaken the Kundalini then slowly raise it from one lotus to another till the brain is reached Each stage corresponds to a new layer of the mind

# WOMEN OF INDIA

*(Delivered at the Shakespeare Club House in Pasadena California on January 18 1900)*

SWAMI VIVEKANANDA Some persons desire to ask questions about Hindu Philosophy before the lecture and to question in general about India after the lecture but the chief difficulty is I do not know what I am to lecture on I would be very glad to lecture on any subject either on Hindu Philosophy or on anything concerning the race its history or its literature If you ladies and gentlemen will suggest anything I would be very glad

QUESTIONER I would like to ask Swami what special principle in Hindu Philosophy you would have us Americans who are a very practical people adopt and what that would do for us beyond what Christianity can do

SWAMI VIVEKANANDA That is very difficult for me to decide it rests upon you If you find anything which you think you ought to adopt and which will be helpful you should take that You see I am not a missionary and I am not going about converting people to my idea My principle is that all such ideas are good and great so that some of your ideas may suit some people in India and some of our ideas may suit some people here so ideas must be cast abroad all over the world

QUESTIONER We would like to know the result of your philosophy has your philosophy and religion lifted your women above our women?

SWAMI VIVEKANANDA You see that is a very invid ious question I like our women and your women too

QUESTIONER Well will you tell us about your women their customs and education and the position they hold in the family?

SWAMI VIVEKANANDA Oh yes those things I would be very glad to tell you So you want to know about Indian women tonight and not philosophy and other things?

THE LECTURE

I must begin by saying that you may have to bear with me a good deal because I belong to an Order of people who never marry so my knowledge of women in all their relations as mother as wife as daughter and sister must necessarily not be so complete as it may be with other men And then India I must remember is a vast continent not merely a country and is inhabited by many different races The nations of Europe are nearer to each other more similar to each other than the races in India You may get just a rough idea of it if I tell you that there are eight different languages in all India Different languages—not dialects—each having a literature of its own The Hindi language alone is spoken by 100 000 000 people the Bengali by about 60 000 000 and so on Then again the four northern Indian languages differ more from the southern Indian languages than any two European languages from each other They are entirely different as much different as your language differs from the Japanese so that you will be astonished to know when I go to southern India unless I meet some people who can talk Sanskrit I have to speak to them in English Furthermore these various races differ from each other in manners customs food dress and in their methods of thought

Then again there is caste Each caste has become as it were a separate racial element If a man lives long enough in India he will be able to tell from the features what caste a man belongs to Then between castes the manners and customs are different And all these castes are exclusive that is to say they would meet socially but they would not eat or drink together

nor intermarry In these things they remain separate They would meet and be friends to each other but there it would end

Although I have more opportunity than many other men to know women in general from my position and my occupation as a preacher continuously travelling from one place to another and coming in contact with all grades of society—(and women even in northern India where they do not appear before men in many places would break this law for religion and would come to hear us preach and talk to us)—still it would be hazardous on my part to assert that I know everything about the women of India

So I will try to place before you the ideal In each nation man or woman represents an ideal consciously or unconsciously being worked out The individual is the external expression of an ideal to be embodied The collection of such individuals is the nation which also represents a great ideal towards that it is moving And therefore it is rightly assumed that to understand a nation you must first understand its ideal for each nation refuses to be judged by any other standard than its own

All growth progress well being or degradation is but relative It refers to a certain standard and each man to be understood has to be referred to that standard of his perfection You see this more markedly in nations what one nation thinks good might not be so regarded by another nation Cousin marriage is quite permissible in this country Now in India it is illegal not only so it would be classed with the most horrible incest Widow marriage is perfectly legitimate in this country Among the higher castes in India it would be the greatest degradation for a woman to marry twice So you see we work through such different ideas that to judge one people by the other s standard would be neither just nor practicable Therefore we must know what the ideal

is that a nation has raised before itself When speaking of different nations we start with a general idea that there is one code of ethics and the same kind of ideals for all races practically however when we come to judge of others we think what is good for us must be good for everybody what we do is the right thing what we do not do of course in others would be outrageous I don t mean to say this as a criticism but just to bring the truth home When I hear Western women denounce the confining of the feet of Chinese ladies they never seem to think of the corsets which are doing far more injury to the race This is just one example for you must know that cramping the feet does not do one millionth part of the injury to the human form that the corset has done and is doing—when every organ is dis placed and the spine is curved like a serpent When measurements are taken you can note the curvatures I do not mean that as a criticism but just to point out to you the situation that as you stand aghast at women of other races thinking that you are supreme the very reason that they don t adopt your manners and customs shows that they also stand aghast at you

Therefore there is some misunderstanding on both sides There is a common platform a common ground of understanding a common humanity which must be the basis of our work We ought to find out that com plete and perfect human nature which is working only in parts here and there It has not been given to one man to have everything in perfection You have a part to play I in my humble way another here is one who plays a little part there another The perfection is the combination of all these parts Just as with individuals so with races Each race has a part to play each race has one side of human nature to develop And we have to take all these together and possibly in the distant future some race will arise in which all these marvellous

individual race perfections attained by the different races will come together and form a new race the like of which the world has not yet dreamed Beyond saying that I have no criticism to offer about anybody I have travelled not a little in my life I have kept my eyes open and the more I go about the more my mouth is closed I have no criticism to offer

Now the ideal woman in India is the mother the mother first and the mother last The word woman calls up to the mind of the Hindu motherhood and God is called Mother As children every day when we are boys we have to go early in the morning with a little cup of water and place it before the mother and mother dips her toe into it and we drink it

In the West the woman is wife The idea of womanhood is concentrated there—as the wife To the ordinary man in India the whole force of womanhood is concentrated in motherhood In the Western home the wife rules In an Indian home the mother rules If a mother comes into a Western home she has to be subordinate to the wife to the wife belongs the home A mother always lives in our homes the wife must be subordinate to her See all the difference of ideas

Now I only suggest comparisons I would state facts so that we may compare the two sides Make this comparison If you ask What is an Indian woman as wife? the Indian asks Where is the American woman as mother? What is she the all glorious who gave me this body? What is she who kept me in her body for nine months? Where is she who would give me twenty times her life if I had need? Where is she whose love never dies however wicked however vile I am? Where is she in comparison with her who goes to the divorce court the moment I treat her a little badly? Oh! American women where is she? I will not find her in your country I have not found the son who thinks mother

is first When we die even then we do not want our wives and our children to take her place Our mother! —we want to die with our head on her lap once more if we die before her Where is she? Is woman a name to be coupled with the physical body only? Ay! the Hindu mind fears all those ideals which say that the flesh must cling unto the flesh No no! Woman! thou shalt not be coupled with anything connected with the flesh The name has been called holy once and for ever for what name is there which no lust can ever approach no carnality ever come near than the one word mother? That is the ideal in India

I belong to an Order very much like what you have in the Mendicant Friars of the Catholic Church that is to say we have to go about without very much in the way of dress and beg from door to door live thereby preach to people when they want it sleep where we can get a place—that way we have to follow And the rule is that the members of this Order have to call every woman mother to every woman and little girl we have to say mother that is the custom Coming to the West that old habit remained and I would say to ladies Yes mother and they are horrified I couldn t understand why they should be horrified Later on I discovered the reason because that would mean that they are old The ideal of womanhood in India is motherhood —that marvellous unselfish all suffering ever forgiving mother The wife walks behind—the shadow She must *imitate the life of the mother that is her duty But* the mother is the ideal of love she rules the family she possesses the family It is the father in India who thrashes the child and spanks when there is something done by the child and always the mother puts herself between the father and the child You see it is just the opposite here It has become the mother s business to spank the children in this country and poor father comes

*in between* You see *ideals are different* I don t mean this as any criticism It is all good—this what you do but our way is what we have been taught for ages You never hear of a mother cursing the child she is forgiving always forgiving Instead of Our Father in Heaven we say *Mother all the time that idea and that word* are ever associated in the Hindu mind with Infinite Love the mother s love being the nearest approach to God s love in this mortal world of ours Mother O Mother be merciful I am wicked! Many children have been wicked but there never was a wicked mother so says the great saint Râmprasâd

There she is—the Hindu mother The son s wife comes in as her daughter just as the mother s own daughter married and went out so her son married and brought in another daughter and she has to fall in line under the government of the queen of queens of his mother Even I who never married belonging to an Order that never marries would be disgusted if my wife supposing I had married dared to displease my mother I would be disgusted Why? Don t I worship my mother? Why should not her daughter in law? Whom I worship why not she? Who is she then that would try to ride over my head and govern my mother? She has to wait till her womanhood is fulfilled and the one thing that fulfils womanhood that is womanliness in woman is motherhood *Wait till she becomes a mother then* she will have the same right That according to the Hindu mind is the great mission of woman—to become a mother But oh how different! Oh how different! My father and mother fasted and prayed for years and years so that I would be born They pray for every child before it is born Says our great law giver Manu giving the definition of an Aryan He is the Aryan who is born through prayer Every child not born through prayer is illegitimate according to the great

law giver The child must be prayed for Those children that come with curses that slip into the world just in a moment of inadvertence because that could not be prevented—what can we expect of such progeny? Mothers of America think of that! Think in the heart of your hearts are you ready to be women? Not any question of race or country or that false sentiment of national pride Who dares to be proud in this mortal life of ours in this world of woes and miseries? What are we before this infinite force of God? But I ask you the question tonight Do you all pray for the children to come? Are you thankful to be mothers or not? Do you think that you are sanctified by motherhood or not? Ask that of your minds If you don t your marriage is a lie your womanhood is false your education is superstition and your children if they come without prayer will prove a curse to humanity

See the different ideals now coming before us From motherhood comes tremendous responsibility There is the basis start from that Well why is mother to be worshipped so much? Because our books teach that it is the pre natal influence that gives the impetus to the child for good or evil Go to a hundred thousand colleges read a million books associate with all the learned men of the world—better off you are when born with the right stamp You are born for good or evil The child is a born god or a born demon that is what the books say Education and all these things come afterwards—are a mere bagatelle You are what you are born Born unhealthful how many drug stores swallowed wholesale will keep you well all through your life? How many people of good healthy lives were born of weak parents were born of sickly blood poisoned parents? How many? None—none We come with a tremendous impetus for good or evil born demons or born gods Education or other things are a bagatelle

Thus say our books direct the pre natal influence Why should mother be worshipped? Because she made herself pure She underwent harsh penances sometimes to keep herself as pure as purity can be For mind you no woman in India thinks of giving up her body to any man it is her own The English as a reform have introduced at present what they call Restitution of con jugal rights but no Indian would take advantage of it When a man comes in physical contact with his wife the circumstances she controls through what prayers and through what vows! For that which brings forth the child is the holiest symbol of God himself It is the greatest prayer between man and wife the prayer that is going to bring into the world another soul fraught with a tremendous power for good or for evil Is it a joke? Is it a simple nervous satisfaction? Is it a brute enjoy ment of the body? Says the Hindu no a thousand times no!

But then following that there comes in another idea The idea we started with was that the ideal is the love for the mother—herself all suffering all forbearing The worship that is accorded to the mother has its fountain head there She was a saint to bring me into the world she kept her body pure her mind pure her food pure her clothes pure her imagination pure for years because I would be born Because she did that she deserves worship And what follows? Linked with motherhood is wifehood

You Western people are individualistic I want to do this thing because I like it I will elbow every one Why? Because I like to I want my own satisfaction so I marry this woman Why? Because I like her This woman marries me Why? Because she likes me There it ends She and I are the only two persons in the whole infinite world and I marry her and she marries me—nobody else is injured nobody else responsible

Your Johns and your Janes may go into the forest and there they may live their lives but when they have to live in society their marriage means a tremendous amount of good or evil to us Their children may be veritable demons burning murdering robbing stealing drinking hideous vile

So what is the basis of the Indian s social order? It is the caste law I am born for the caste I live for the caste I do not mean myself because having joined an Order we are outside I mean those that live in civil society Born in the caste the whole life must be lived according to caste regulation In other words in the present day language of your country the Western man is born individualistic while the Hindu is socialistic —entirely socialistic Now then the books say if I allow you freedom to go about and marry any woman you like and the woman to marry any man she likes what happens? You fall in love the father of the woman was perchance a lunatic or a consumptive The girl falls in love with the face of a man whose father was a roaring drunkard What says the law then? The law lays down that all these marriages would be illegal The children of drunkards consumptives lunatics etc shall not be married The deformed humpbacked crazy idiotic— no marriage for them absolutely none says the law

But the Mohammedan comes from Arabia and he has his own Arabian law so the Arabian desert law has been forced upon us The Englishman comes with his law he forces it upon us so far as he can We are conquered He says Tomorrow I will marry your sister What can we do? Our law says those that are born of the same family though a hundred degrees distant must not marry that is illegitimate it would deteriorate or make the race sterile That must not be and there it stops So I have no voice in my marriage nor my sister It is the caste that determines all that

We are married sometimes when children Why? Be cause the caste says if they have to be married anyway without their consent it is better that they are married very early before they have developed this love if they are allowed to grow up apart the boy may like some other girl and the girl some other boy and then some thing evil will happen and so says the caste stop it there I don t care whether my sister is deformed or good looking or bad looking she is my sister and that is enough he is my brother and that is all I need to know So they will love each other You may say Oh they lose a great deal of enjoyment—those exquisite emotions of a man falling in love with a woman and a woman falling in love with a man This is a sort of tame thing loving each other like brothers and sisters as though they have to So be it but the Hindu says We are *socialistic* For the sake of one man s or woman s exquisite pleasure we don t want to load misery on hundred of others

There they are—married The wife comes home with her husband that is called the second marriage Marriage at an early age is considered the first marriage and they grow up separately with women and with their parents When they are grown there is a second cere mony performed called a second marriage And then they live together but under the same roof with his mother and father When she becomes a mother she takes her place in turn as queen of the family group

Now comes another peculiar Indian institution I have just told you that in the first two or three castes the widows are not allowed to marry They cannot even if they would Of course it is a hardship on many There is no denying that not all the widows like it very much because non marrying entails upon them the life of a student That is to say a student mu t not eat meat or fish nor drink wine nor dress except in white clothes

and so on there are many regulations We are a nation of monks—always making penance and we like it Now you see a woman never drinks wine or eats meat It was a hardship on us when we were students but not on the girls Our women would feel degraded at the idea of eating meat Men eat meat sometimes in some castes women never Still not being allowed to marry must be a hardship to many I am sure of that

*But we must go back to the idea they are intensely socialistic* In the higher castes of every country you will find the statistics show that the number of women is always much larger than the number of men Why? Because in the higher castes for generation after generation the women lead an easy life They neither toil nor spin yet Solomon in all his glory was not arrayed like one of them And the poor boys they die like flies The girl has a cat s nine lives they say in India You will read in the statistics that they outnumber the boys in a very short time except now when they are taking to work quite as hard as the boys The number of girls in the higher castes is much larger than in the lower Conditions are quite opposite in the lower castes There they all work hard women a little harder some times because they have to do the domestic work But mind you I never would have thought of that but one of your American travellers Mark Twain writes this about India In spite of all that Western critics have said of Hindu customs I never saw a woman harnessed to a plough with a cow or to a cart with a dog as is done in some European countries I saw no woman or girl at work in the fields in India On both sides and ahead (of the railway train) brown bodied naked men and boys are ploughing in the fields But not a woman In these two hours I have not seen a woman or a girl working in the fields In India even the lowest caste never does any hard work They generally have an easy lot com

pared to the same class in other nations and as to ploughing they never do it

Now there you are Among the lower classes the number of men is larger than the number of women and what would you naturally expect? A woman gets more chances of marriage the number of men being larger

Relative to such questions as to widows not marrying among the first two castes the number of women is disproportionately large and here is a dilemma Either you have a non marriageable widow problem and misery or the non husband getting young lady problem To face the widow problem or the old maid problem? There you are either of the two Now go back again to the idea that the Indian mind is socialistic It says Now look here! we take the widow problem as the lesser one Why? Because they have had their chance they have been married If they have lost their chance at any rate they have had one Sit down be quiet and consider these poor girls—they have not had one chance of marriage Lord bless you! I remember once in Oxford Street it was after ten o clock and all those ladies coming there hundreds and thousands of them shopping and some man an American looks around and he says My Lord! how many of them will ever get husbands I wonder! So the Indian mind said to the widows Well you have had your chance and now we are very very sorry that such mishaps have come to you but we cannot help it others are waiting

Then religion comes into the question the Hindu religion comes in as a comfort For mind you our religion teaches that marriage is something bad it is only for the weak The very spiritual man or woman would not marry at all So the religious woman says Well the Lord has given me a better chance What is the use of marrying? Thank God worship God what is the

use of my loving man? Of course all of them cannot put their mind on God Some find it simply impossible They have to suffer but the other poor people they should not suffer for them Now I leave this to your judgment but that is their idea in India

Next we come to woman as daughter The great difficulty in the Indian household is the daughter The daughter and caste combined ruin the poor Hindu because you see she must marry in the same caste and even inside the caste exactly in the same order and so the poor man sometimes has to make himself a beggar to get his daughter married The father of the boy demands a very high price for his son and this poor man sometimes has to sell everything just to get a husband for his daughter The great difficulty of the Hindu s life is the daughter And curiously enough the word daughter in Sanskrit is duhitâ The real derivation is that in ancient times the daughter of the family was accustomed to milk the cows and so the word duhita comes from duh to milk and the word daughter really means a milkmaid Later on they found a new meaning to that word duhita the milkmaid—she who milks away all the milk of the family That is the second meaning

These are the different relations held by our Indian women As I have told you the mother is the greatest in position the wife is next and the daughter comes after them It is a most intricate and complicated series of gradation No foreigner can understand it even if he lives there for years For instance we have three forms of the personal pronoun they are a sort of verbs in our language One is very respectful one is middling and the lowest is just like *thou* and *thee* To children and servants the last is addressed The middling one is used with equals You see these are to be applied in all the intricate relations of life For example to my

elder sister I always throughout my life use the pronoun *apani* but she never does in speaking to me she says *tumi* to me She should not even by mistake say *apani* to me because that would mean a curse Love the love toward those that are superior should always be expressed in that form of language That is the custom Similarly I would never dare address my elder sister or elder brother much less my mother or father as *tu* or *tum* or *tumi* As to calling our mother and father by name why we would never do that Before I knew the customs of this country I received such a shock when the son in a very refined family got up and called the mother by name! However I got used to that That is the custom of the country But with us we never pronounce the name of our parents when they are present It is always in the third person plural even before them

Thus we see the most complicated mesh work in the social life of our men and our women and in our degrees of relationship We don t speak to our wives before our elders it is only when we are alone or when inferiors are present If I were married I would speak to my wife before my younger sister my nephews or nieces but not before my elder sister or parents I cannot talk to my sisters about their husbands at all The idea is we are a monastic race The whole social organisation has that one idea before it Marriage is thought of as something impure something lower Therefore the subject of love would never be talked of I cannot read a novel before my sister or my brothers or my mother or even before others I close the book

Then again eating and drinking is all in the same category We do not eat before superiors Our women never eat before men except they be the children or inferiors The wife would die rather than as she says munch before her husband Sometimes for instance brothers and sisters may eat together and if I and my

sister are eating and the husband comes to the door my sister stops and the poor husband flies out

These are the customs peculiar to the country A few of these I note in different countries also As I never married myself I am not perfect in all my knowledge about the wife Mother sisters—I know what they are and other people s wives I saw from that I gather what I have told you

As to education and culture it all depends upon the man That is to say where the men are highly cultured there the women are where the men are not women are not Now from the oldest times you know the primary education according to the old Hindu customs belongs to the village system All the land from time immemorial was nationalised as you say—belonged to the Government There never is any private right in land The revenue in India comes from the land because every man holds so much land from the Government This land is held in common by a community it may be of five ten twenty or a hundred families They govern the whole of the land pay a certain amount of revenue to the Government maintain a physician a village schoolmaster and so on

Those of you who have read Herbert Spencer remember what he calls the monastery system of *education that was tried in Europe and which in some* parts proved a success that is there is one schoolmaster whom the village keeps These primary schools are very rudimentary because our methods are so simple Each boy brings a little mat and his paper to begin with is palm leaves Palm leaves first paper is too costly Each boy spreads his little mat and sits upon it brings out his inkstand and his books and begins to write A little arithmetic some Sanskrit grammar a little of language and accounts—these are taught in the primary school

A little book on ethics taught by an old man we learned by heart and I remember one of the lessons

For the good of a village a man ought to give up his family

For the good of a country he ought to give up his village

For the good of humanity he may give up his country

For the good of the world everything

Such verses are there in the books We get them by heart and they are explained by teacher and pupil These things we learn both boys and girls together Later on the education differs The old Sanskrit universities are mainly composed of boys The girls very rarely go up to those universities but there are a few exceptions

In these modern days there is a greater impetus towards higher education on the European lines and the trend of opinion is strong towards women getting this higher education Of course there are some people in India who don t want it but those who do want it carried the day It is a strange fact that Oxford and Cambridge are closed to women today so are Harvard and Yale but Calcutta University opened its doors to women more than twenty years ago I remember that the year I graduated several girls came out and graduated —the same standard the same course the same in every thing as the boys and they did very well indeed And our religion does not prevent a woman being educated at all In this way the girl should be educated even thus she should be trained and in the old books we find that the universities were equally resorted to by both girls and boys but later the education of the whole nation was neglected What can you expect under foreign rule? The foreign conqueror is not there to do good to us he wants his money I studied hard for twelve

years and became a graduate of Calcutta University now I can scarcely make $5 00 a month in my country Would you believe it? It is actually a fact So these educational institutions of foreigners are simply to get a lot of useful practical slaves for a little money—to turn out a host of clerks postmasters telegraph operators and so on There it is

As a result education for both boys and girls is neglected entirely neglected There are a great many things that should be done in that land but you must always remember if you will kindly excuse me and permit me to use one of your own proverbs What is sauce for the goose is sauce for the gander Your foreign born ladies are always crying over the hardships of the Hindu woman and never care for the hardships of the Hindu man They are all weeping salt tears But who are the little girls married to? Some one when told that they are all married to old men asked And what do the young men do? What! are all the girls married to old men only to old men? We are born old—perhaps all the men there

The ideal of the Indian race is freedom of the soul This world is nothing It is a vision a dream This life is one of many millions like it The whole of this nature is Maya is phantasm a pest house of phantasms That is the philosophy Babies smile at life and think it so beautiful and good but in a few years they will have to revert to where they began They began life crying and they will leave it crying Nations in the vigour of their youth think that they can do anything and everything We are the gods of the earth We are the chosen people They think that God Almighty has given them a charter to rule over all the world to advance His plans to do anything they like to turn the world upside down They have a charter to rob murder kill God has given them this and they do that because they

are only babes So empire after empire has arisen—glorious resplendent—now vanished away—gone nobody knows where it may have been stupendous in its ruin

As a drop of water upon a lotus leaf tumbles about and falls in a moment even so is this mortal life Every where we turn are ruins Where the forest stands today was once the mighty empire with huge cities That is the dominant idea the tone the colour of the Indian mind We know you Western people have the youthful blood coursing through your veins We know that nations like men have their day Where is Greece? Where is Rome? Where that mighty Spaniard of the other day? Who knows through it all what becomes of India? Thus they are born and thus they die they rise and fall The Hindu as a child knows of the Mogul invader whose cohorts no power on earth could stop who has left in your language the terrible word Tartar The Hindu has learned his lesson He does not want to prattle like the babes of today Western people say what you have to say This is your day Onward go on babes have your prattle out This is the day of the babies to prattle We have learned our lesson and are quiet You have a little wealth today and you look down upon us Well this is your day Prattle babes prattle—this is the Hindu s attitude

The Lord of Lords is not to be attained by much frothy speech The Lord of Lords is not to be attained even by the powers of the intellect He is not gained by much power of conquest That man who knows the secret source of things and that everything else is evanes cent unto him He the Lord comes unto none else India has learned her lesson through ages and ages of experience She has turned her face towards Him She has made many mistakes loads and loads of rubbish are heaped upon the race Never mind what of that? What is the clearing of rubbish the cleaning of cities

and all that? Does that give life? Those that have fine institutions they die And what of institutions those tin plate Western institutions made in five days and broken on the sixth? One of these little handful nations cannot keep alive for two centuries together And our institutions have stood the test of ages Says the Hindu Yes we have buried all the old nations of the earth and stand here to bury all the new races also because our ideal is not this world but the other Just as your ideal is so shall you be If your ideal is mortal if your ideal is of this earth so shalt thou be If your ideal is matter matter shalt thou be Behold! Our ideal is the Spirit That alone exists Nothing else exists and like Him we live for ever

# MY LIFE AND MISSION

*(Delivered at the Shakespeare Club of Pasadena California on January 27 1900 )*

Now ladies and gentlemen the subject for this morning was to have been the Vedanta Philosophy That subject itself is interesting but rather dry and very vast

Meanwhile I have been asked by your president and some of the ladies and gentlemen here to tell them something about my work and what I have been doing It may be interesting to some here but not so much so to me In fact I don t quite know how to tell it to you for this will have been the first time in my life that I have spoken on that subject

Now to understand what I have been trying to do in my small way I will take you in imagination to India We have not time to go into all the details and all the ramifications of the subject nor is it possible for you to understand all the complexities in a foreign race in this short time Suffice it to say I will at least try to give you a little picture of what India is like

It is like a gigantic building all tumbled down in ruins At first sight then there is little hope It is a nation gone and ruined But you wait and study then you see something beyond that The truth is that so long as the principle the ideal of which the outer man is the expression is not hurt or destroyed the man lives and there is hope for that man If your coat is tolen twenty times that is no reason why you should be destroyed You can get a new coat The coat is un essential The fact that a rich man is robbed does not hurt the vitality of the man does not mean death The man will survive

Standing on this principle we look in and we see—what? India is no longer a political power it is an enslaved race Indians have no say no voice in their own government they are three hundred millions of slaves—nothing more! The average income of a man in India is two shillings a month The common state of the vast mass of the people is starvation so that with the least decrease in income millions die A little famine means death So there too when I look on that side of India I see ruin—hopeless ruin

But we find that the Indian race never stood for wealth Although they acquired immense wealth perhaps more than any other nation ever acquired yet the nation did not stand for wealth It was a powerful race for ages yet we find that that nation never stood for power never went out of the country to conquer Quite content within their own boundaries they never fought anybody The Indian nation never stood for imperial glory Wealth and power then were not the ideals of the race

What then? Whether they were wrong or right—that is not the question we discuss—that nation among all the children of men has believed and believed intensely that this life is not real The real is God and they must cling unto that God through thick and thin In the midst of their degradation religion came first The Hindu man drinks religiously sleeps religiously walks religiously marries religiously robs religiously

Did you ever see such a country? If you want to get up a gang of robbers the leader will have to preach some sort of religion then formulate some bogus metaphysics and say that this method is the clearest and quickest way to get God Then he finds a following Otherwise not That shows that the vitality of the race the mission of the race is religion and because that has not been touched therefore that race lives

See Rome Rome s mission was imperial power

expansion And so soon as that was touched Rome fell to pieces passed out The mission of Greece was intellect as soon as that was touched why Greece passed out So in modern times Spain and all these modern countries Each nation has a mission for the world So long as that mission is not hurt that nation lives despite every difficulty But as soon as its mission is destroyed the nation collapses

Now that vitality of India has not been touched yet They have not given up that and it is still strong—in spite of all their superstitions Hideous superstitions are there most revolting some of them Never mind The national life current is still there—the mission of the race

The Indian nation never will be a powerful con quering people—never They will never be a great political power that is not their business that is not the note India has to play in the great harmony of nations But what has she to play? God and God alone She clings unto that like grim death Still there is hope there

So then after your analysis you come to the con clusion that all these things all this poverty and misery are of no consequence—the man is living still and there fore there is hope

Well! You see religious activities going on all through the country I don t recall a year that has not given birth to several new sects in India The stronger the current the more the whirlpools and eddies Sects are not signs of decay they are a sign of life Let sects multiply till the time comes when every one of us is a sect each individual We need not quarrel about that

Now take your country (I don t mean any criti cism) Here the social laws the political formation everything is made to facilitate man s journey in this life He may live very happily so long as he is on this earth Look at your streets—how clean! Your beauti ful cities! And in how many ways a man can make

money! How many channels to get enjoyment in this life! But if a man here should say Now look here I shall sit down under this tree and meditate I don t want to work why he would have to go to jail See? There would be no chance for him at all None A man can live in this society only if he falls in line He has to join in this rush for the enjoyment of good in this life or he dies

Now let us go back to India There if a man says I shall go and sit on the top of that mountain and look at the tip of my nose all the rest of my days everybody says Go and God speed to you! He need not speak a word Somebody brings him a little cloth and he is all right But if a man says Behold I am going to enjoy a little of this life every door is closed to him

I say that the ideas of both countries are unjust I see no reason why a man here should not sit down and look at the tip of his nose if he likes Why should every body here do just what the majority does? I see no reason

Nor why in India a man should not have the goods of this life and make money But you see how those vast millions are forced to accept the opposite point of view by tyranny This is the tyranny of the sages This is the tyranny of the great tyranny of the spiritual tyranny of the intellectual tyranny of the wise And the tyranny of the wise mind you is much more powerful than the tyranny of the ignorant The wise the intellec tual when they take to forcing their opinions upon others know a hundred thousand ways to make bonds and barriers which it is not in the power of the ignorant to break

Now I say that this thing has got to stop There is no use in sacrificing millions and millions of people to produce one spiritual giant If it is possible to make a society where the spiritual giant will be produced and

all the rest of the people will be happy as well that is good but if the millions have to be ground down that is unjust Better that the one great man should suffer for the salvation of the world

In every nation you will have to work through their methods To every man you will have to speak in his own language Now in England or in America if you want to preach religion to them you will have to work through political methods—make organisations societies with voting balloting a president and so on because that is the language the method of the Western race On the other hand if you want to speak of politics in India you must speak through the language of religion You will have to tell them something like this The man who cleans his house every morning will acquire such and such an amount of merit he will go to heaven or he comes to God Unless you put it that way they won t listen to you It is a question of language The thing done is the same But with every race you will have to speak their language in order to reach their hearts And that is quite just We need not fret about that

In the Order to which I belong we are called Sannyasins The word means a man who has renounced This is a very very very ancient Order Even Buddha who was 560 years before Christ belonged to that Order He was one of the reformers of his Order That was all So ancient! You find it mentioned away back in the Vedas the oldest book in the world In old India there was the regulation that every man and woman towards the end of their lives must get out of social life altogether and think of nothing except God and their own salvation This was to get ready for the great event—death So old people used to become Sannyasins in those early days Later on young people began to give up the world And young people are

active They could not sit down under a tree and think all the time of their own death so they went abou preaching and starting sects and so on Thus Buddha being young started that great reform Had he been an old man he would have looked at the tip of his nose and died quietly

The Order is not a church and the people who join the Order are not priests There is an absolute difference between the priests and the Sannyasins In India priesthood like every other business in a social life is a hereditary profession A priest s son will become a priest just as a carpenter s son will be a carpenter or a blacksmith s son a blacksmith The priest must always be married The Hindu does not think a man is complete unless he has a wife An unmarried man has no right to perform religious ceremonies

The Sannyasins do not possess property and they do not marry Beyond that there is no organisation The only bond that is there is the bond between the teacher and the taught—and that is peculiar to India The teacher is not a man who comes just to teach me and I pay him so much and there it ends In India it is really like an adoption The teacher is more than my own father and I am truly his child his son in every respect I owe him obedience and reverence first be fore my own father even because they say the father gave me this body but he showed me the way to salva tion he is greater than father And we carry this love this respect for our teacher all our lives And that is the only organisation that exists I adopt my disciples Sometimes the teacher will be a young man and the disciple a very old man But never mind he is the son and he calls me Father and I have to address him as my son my daughter and so on

Now I happened to get an old man to teach me and he was very peculiar He did not go much for

intellectual scholarship scarcely studied books but when he was a boy he was seized with the tremendous idea of getting truth direct First he tried by studying his own religion Then he got the idea that he must get the truth of other religions and with that idea he joined all the sects one after another For the time being he did exactly what they told him to do—lived with the devotees of these different sects in turn until interpenetrated with the particular ideal of that sect After a few years he would go to another sect When he had gone through with all that he came to the conclusion that they were all good He had no criticism to offer to any one they are all so many paths leading to the same goal And then he said That is a glorious thing that there should be so many paths because if there were only one path perhaps it would suit only an individual man The more the number of paths the more the chance for every one of us to know the truth If I cannot be taught in one language I will try another and so on Thus his benediction was for every religion

Now all the ideas that I preach are only an attempt to echo his ideas Nothing is mine originally except the wicked ones everything I say which is false and wicked But every word that I have ever uttered which is true and good is simply an attempt to echo his voice Read his life by Prof Max Muller [1]

Well there at his feet I conceived these ideas—there with some other young men I was just a boy I went there when I was about sixteen Some of the other boys were still younger some a little older—about a dozen or more And together we conceived that this ideal had to be spread And not only spread but made practical That is to say we must show the spirituality of the Hindus the mercifulness of the Buddhists the activity of

[1] *R m k hna H s Life and Say gs* fi t publ hed in London ir 1896 Rep int d n 1951 by Adva ta Ashrama

the Christians the brotherhood of the Mohammedans by our practical lives We shall start a universal religion now and here we said we will not wait

Our teacher was an old man who would never touch a coin with his hands He took just the little food offered just so many yards of cotton cloth no more He could never be induced to take any other gift With all these marvellous ideas he was strict because that made him free The monk in India is the friend of the prince today dines with him and tomorrow he is with the beggar sleeps under a tree He must come into contact with everyone must always move about As the saying is The rolling stone gathers no moss The last fourteen years of my life I have never been for three months at a time in any one place—continually rolling So do we all

Now this handful of boys got hold of these ideas and all the practical results that sprang out of these ideas Universal religion great sympathy for the poor and all that are very good in theory but one must practise

Then came the sad day when our old teacher died We nursed him the best we could We had no friends Who would listen to a few boys with their crank notions? Nobody At least in India boys are nobodies Just think of it—a dozen boys telling people vast big ideas saying they are determined to work these ideas out in life Why everybody laughed From laughter it bcame serious it became persecution Why the parents of the boys came to feel like spanking every one of us And the more we were derided the more determined we became

Then came a terrible time—for me personally and for all the other boys as well But to me came such misfortune! On the one side was my mother my brothers My father died at that time and we were left poor Oh very poor almost starving all the time I was the only

hope of the family the only one who could do anything to help them I had to stand between my two worlds On the one hand I would have to see my mother and brothers starve unto death on the other I had believed that this man s ideas were for the good of India and the world and had to be preached and worked out And so the fight went on in my mind for days and months Sometimes I would pray for five or six days and nights together without stopping Oh the agony of those days! I was living in hell! The natural affec tions of my boy s heart drawing me to my family—I could not bear to see those who were the nearest and dearest to me suffering On the other hand nobody to sympathise with me Who would sympathise with the imaginations of a boy? Imaginations that caused so much suffering to others! Who would sympathise with me? None—except one

That one s sympathy brought blessing and hope She was a woman Our teacher this great monk was married when he was a boy and she a mere child When he became a young man and all this religious zeal was upon him she came to see him Although they had been married for long they had not seen very much of each other until they were grown up Then he said to his wife Behold I am your husband you have a right to this body But I cannot live the sex life although I have married you I leave it to your judgment And she wept and said God speed you! The Lord bless you! Am I the woman to degrade you? If I can I will help you Go on in your work

That was the woman The husband went on and became a monk in his own way and from a distance the wife went on helping as much as she could And later when the man had become a great spiritual giant she came—really she was the first disciple—and she spent the rest of her life taking care of the body of the

man He never knew whether he was living or dying or anything Sometimes when talking he would get so excited that if he sat on live charcoals he did not know it Live charcoals! Forgetting all about his body all the time

Well that lady his wife was the only one who sympathised with the idea of those boys But she was powerless She was poorer than we were Never mind! We plunged into the breach I believed as I was living that these ideas were going to rationalise India and bring better days to many lands and foreign races With that belief came the realisation that it is better that a few persons suffer than that such ideas should die out of the world What if a mother or two brothers die? It is a sacrifice Let it be done No great thing can be done without sacrifice The heart *must be plucked out and the bleeding heart placed upon* the altar Then great things are done Is there any other way? None have found it I appeal to each one of you to those who have accomplished any great thing Oh how much it has cost! What agony! What torture! What terrible suffering is behind every deed of success in every life You know that all of you

And thus we went on that band of boys The only thing we got from those around us was a kick and a curse—that was all Of course we had to beg from door to door for our food got hips and haws—the refuse of everything—a piece of bread here and there We got hold of a broken down old house with hissing cobras living underneath and because that was the cheapest we went into that house and lived there

Thus we went on for some years in the meanwhile making excursions all over India trying to bring about the idea gradually Ten years were spent without a ray of light! Ten more years! A thousand times despondency came but there was one thing always to keep us

hopeful—the tremendous faithfulness to each other the tremendous love between us I have got a hundred men and women around me if I become the devil him self tomorrow they will say Here we are still! We ll never give you up! That is a great blessing In happiness in misery in famine in pain in the grave in heaven or in hell who never gives me up is my friend Is such friendship a joke? A man may have salvation through such friendship That brings salvation if we can love like that If we have that faithfulness why there is the essence of all concentration You need not worship any gods in the world if you have that faith that strength that love And that was there with us all throughout that hard time That was there That made us go from the Himalayas to Cape Comorin from the Indus to the Brahmaputra

This band of boys began to travel about Gradually we began to draw attention ninety per cent was antagonism very little of it was helpful For we had one fault we were boys—in poverty and with all the rough ness of boys He who has to make his own way in life is a bit rough he has not much time to be smooth and suave and polite— my lady and my gentleman and all that You have seen that in life always He is a rough diamond he has not much polish he is a jewel in an indifferent casket

And there we were No compromise! was the watchword This is the ideal and this has got to be carried out If we meet the king though we die we must give him a bit of our minds if the peasant the same Naturally we met with antagonism

But mind you this is life s experience if you really want the good of others the whole universe may stand against you and cannot hurt you It must crumble be fore your power of the Lord Himself in you if you are sincere and really unselfish And those boys were that

They came as children pure and fresh from the hands of nature Said our Master I want to offer at the altar of the Lord only those flowers that have not even been smelled fruits that have not been touched with the fingers The words of the great man sustained us all For he saw through the future life of those boys that he collected from the streets of Calcutta so to say People used to laugh at him when he said You will see—this boy that boy what he becomes His faith was unalterable Mother showed it to me I may be weak but when She says this is so—She can never make mistakes—it must be so

*So things went on and on for ten years without any* light but with my health breaking all the time It tells on the body in the long run sometimes one meal at nine in the evening another time a meal at eight in the morning another after two days another after three days —and always the poorest and roughest thing Who is going to give to the beggar the good things he has? And then they have not much in India And most of the time walking climbing snow peaks sometimes ten miles of hard mountain climbing just to get a meal They eat unleavened bread in India and sometimes they have it stored away for twenty or thirty days until it is harder than bricks and then they will give a square of that I would have to go from house to house to collect sufficient for one meal And then the bread was so hard it made my mouth bleed to eat it Literally you can break your teeth on that bread Then I would put it in a pot and pour over it water from the river For months and months I existed that way—of course it was telling on the health

Then I thought I have tried India it is time for me to try another country At that time your Parliament of Religions was to be held and someone was to be sent from India I was just a vagabond but I said If

you send me I am going I have not much to lose and I don t care if I lose that It was very difficult to find the money but after a long struggle they got together just enough to pay for my passage—and I came Came one or two months earlier so that I found myself drifting about in the streets here without knowing anybody

But finally the Parliament of Religions opened and I met kind friends who helped me right along I worked a little collected funds started two papers and so on After that I went over to England and worked there At the same time I carried on the work for India in America too

My plan for India as it has been developed and centralised is this I have told you of our lives as monks there how we go from door to door so that religion is brought to everybody without charge except perhaps a broken piece of bread That is why you see the lowest of the low in India holding the most exalted religious ideas It is all through the work of these monks But ask a man Who are the English? —he does not know He says perhaps They are the children of those giants they speak of in those books are they not? Who governs you? We don t know What is the government? They don t know But they know philosophy It is a practical want of intellectual education about life on this earth they suffer from These millions and millions of people are ready for life beyond this world—is not that enough for them? Certainly not They must have a better piece of bread and a better piece of rag on their bodies The great question is How to get that better bread and better rag for these sunken millions

First I must tell you there is great hope for them because you see they are the gentlest people on earth Not that they are timid When they want to fight they fight like demons The best soldiers the English have are recruited from the peasantry of India Death is a

thing of no importance to them Their attitude is Twenty times I have died before and I shall die many times after this What of that? They never turn back They are not given to much emotion but they make very good fighters

Their instinct however is to plough If you rob them murder them tax them do anything to them they will be quiet and gentle so long as you leave them free to practise their religion They never interfere with the religion of others Leave us liberty to worship our gods and take everything else! That is their attitude When the English touch them there trouble starts That was the real cause of the 1857 Mutiny—they would not bear religious repression The great Mohammedan governments were simply blown up because they touched the Indians religion

But aside from that they are very peaceful very quiet very gentle and above all not given to vice The absence of any strong drink oh it makes them infinitely superior to the mobs of any other country You cannot compare the decency of life among the poor in India with life in the slums here A slum means poverty but poverty does not mean sin indecency and vice in India In other countries the opportunities are such that only the indecent and the lazy need be poor There is no reason for poverty unless one is a fool or a blackguard—the sort who want city life and all its luxuries They won t go into the country They say We are here with all the fun and you must give us bread But that is not the case in India where the poor fellows work hard from morning to sunset and somebody else takes the bread out of their hands and their children go hungry Notwithstanding the millions of tons of wheat raised in India scarcely a grain passes the mouth of a peasant He lives upon the poorest corn which you would not feed to your canary birds

Now there is no reason why they should suffer such distress—these people oh so pure and good! We hear so much talk about the sunken millions and the degraded women of India—but none come to our help What do they say? They say You can only be helped you can only be good by ceasing to be what you are It is useless to help Hindus These people do not know the history of races There will be no more India if they change their religion and their institutions because that is the vitality of that race It will disappear so really you will have nobody to help

Then there is the other great point to learn that you can never help really What can we do for each other? You are growing in your own life I am growing in my own It is possible that I can give you a push in your life knowing that in the long run all roads lead to Rome It is a steady growth No national civilisation is perfect yet Give that civilisation a push and it will arrive at its own goal don t strive to change it Take away a nation s institutions customs and manners and what will be left? They hold the nation together

But here comes the very learned foreign man and he says Look here you give up all those institutions and customs of thousands of years and take my tom fool tin pot and be happy This is all nonsense

We will have to help each other but we have to go one step farther the first thing is to become unselfish in help If you do just what I tell you to do I will help you Otherwise not Is that help?

And so if the Hindus want to help you spiritually there will be no question of limitations perfect unselfish ness I give and there it ends It is gone from me My mind my powers my everything that I have to give is given given with the idea to give and no more I have seen many times people who have robbed half the world and they gave $20 000 to convert the heathen

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tal For what is a capital? It is the heart of a nation All the blood comes into the heart and thence it is dis tributed so all the wealth all the ideas all the education all spirituality will converge towards the capital and spread from it

I am glad to tell you I have made a rude beginning But the same work I want to do on parallel lines for women And my principle is each one helps himself My help is from a distance There are Indian women English women and I hope American women will come to take up the task As soon as they have begun I wash my hands off it No man shall dictate to a woman nor a woman to a man Each one is inde pendent What bondage there may be is only that of love Women will work out their own destinies—much better too than men can ever do for them All the mischief to women has come because men undertook to shape the destiny of women And I do not want to start with any initial mistake One little mistake made then will go on multiplying and if you succeed in the long run that mistake will have assumed gigantic propor tions and become hard to correct So if I made this mistake of employing men to work out this women s part of the work why women will never get rid of that— it will have become a custom But I have got an oppor tunity I told you of the lady who was my Master s wife We have all great respect for her She never dictates to us So it is quite safe

That part has to be accomplished

## BUDDHA'S MESSAGE TO THE WORLD

*(Delivered in San Francisco on March 18 1900)*

Buddhism is historically the most important religion—historically not philosophically—because it was the most tremendous religious movement that the world ever saw the most gigantic spiritual wave ever to burst upon human society There is no civilisation on which its effect has not been felt in some way or other

The followers of Buddha were most enthusiastic and very missionary in spirit They were the first among the adherents of various religions not to remain content with the limited sphere of their Mother Church They spread far and wide They travelled east and west north and south They reached into darkest Tibet they went into Persia Asia Minor they went into Russia Poland and many other countries of the Western world They went into China Korea Japan they went into Burma Siam the East Indies and beyond When Alexander the Great through his military conquests brought the Mediterranean world in contact with India the wisdom of India at once found a channel through which to spread over vast portions of Asia and Europe Buddhist priests went out teaching among the different nations and as they taught superstition and priestcraft began to vanish like mist before the sun

To understand this movement properly you should know what conditions prevailed in India at the time Buddha came just as to understand Christianity you have to grasp the state of Jewish society at the time of Christ It is necessary that you have an idea of Indian society six hundred years before the birth of Christ by which time Indian civilisation had already completed its growth

When you study the civilisation of India you find

that it has died and revived several times this is its peculiarity Most races rise once and then decline for ever There are two kinds of people those who grow continually and those whose growth comes to an end The peaceful nations India and China fall down yet rise again but the others once they go down do not come up—they die Blessed are the peacemakers for they shall enjoy the earth

At the time Buddha was born India was in need of a great spiritual leader a prophet There was already a most powerful body of priests You will understand the situation better if you remember the history of the Jews —how they had two types of religious leaders priests and prophets the priests keeping the people in ignorance and grinding superstitions into their minds The methods of worship the priests prescribed were only a means by which they could dominate the people All through the Old Testament you find the prophets challenging the superstitions of the priests The outcome of this fight was the triumph of the prophets and the defeat of the priests

Priests believe that there is a God but that this God can be approached and known only through them People can enter the Holy of Holies only with the permission of the priests You must pay them worship them place everything in their hands Throughout the history of the world this priestly tendency has cropped up again and again—this tremendous thirst for power this tigerlike thirst seems a part of human nature The priests dominate you lay down a thousand rules for you They describe simple truths in roundabout ways They tell you stories to support their own superior position If you want to thrive in this life or go to heaven after death you have to pass through their hands You have to perform all kinds of ceremonies and rituals All this has made life so complicated and has so confused the brain that if I give you plain words you will go home unsatisfied

You have become thoroughly befuddled The less you understand the better you feel! The prophets have been giving warnings against the priests and their superstitions and machinations but the vast mass of people have not yet learned to heed these warnings—education is yet to come to them

Men must have education They speak of democ racy of the equality of all men these days But how will a man know he is equal with all? He must have a strong brain a clear mind free of nonsensical ideas he must pierce through the mass of superstitions en crusting his mind to the pure truth that is in his inmost Self Then he will know that all perfections all powers are already within himself that these have not to be given him by others When he realises this he becomes free that moment he achieves equality He also realises that every one else is equally as perfect as he and he does not have to exercise any power physical mental or moral over his brother men He abandons the idea that there was ever any man who was lower than him self Then he can talk of equality not until then

Now as I was telling you among the Jews there was a continuous struggle between the priests and the prophets and the priests sought to monopolise power and knowledge till they themselves began to lose them and the chains they had put on the feet of the people were on their own feet The masters always become slaves before long The culmination of the struggle was the victory of Jesus of Nazareth This triumph is the history of Christianity Christ at last succeeded in over throwing the mass of witchcraft This great prophet killed the dragon of priestly selfishness rescued from its clutches the jewel of truth and gave it to all the world so that whosoever desired to possess it would have abso lute freedom to do so and would not have to wait on the pleasure of any priest or priests

The Jews were never a very philosophical race they had not the subtlety of the Indian brain nor did they have the Indian s psychic power The priests in India the Brahmins possessed great intellectual and psychic powers It was they who began the spiritual development of India and they accomplished wonderful things But the time came when the free spirit of development that had at first actuated the Brahmins disappeared They began to arrogate powers and privi leges to themselves If a Brahmin killed a man he would not be punished The Brahmin by his very birth is the lord of the universe! Even the most wicked Brahmin must be worshipped!

But while the priests were flourishing there existed also the poet prophets called Sannyasins All Hindus whatever their castes may be must for the sake of attaining spirituality give up their work and prepare for death No more is the world to be of any interest to them They must go out and become Sannyasins The Sannyasins have nothing to do with the two thousand ceremonies that the priests have invented Pronounce certain words—ten syllables twenty syllables and so on —all these things are nonsense

So these poet prophets of ancient India repudiated the ways of the priest and declared the pure truth They tried to break the power of the priests and they succeeded a l ttle But in two generations their disciples went back to the superstitious—roundabout ways of the priests –became priests themselves You can get truth only through us! Truth became crystallised again and again prophets came to break the encrustations and free the truth and so it went on Yes there must be all the time the man the prophet or else humanity will die

You wonder why there have to be all these round about methods of the priests Why can you not come directly to the truth? Are you ashamed of God s truth

that you have to hide it behind all kinds of intricate ceremonies and formulas? Are you ashamed of God that you cannot confess His truth before the world? Do you call that being religious and spiritual? The priests are the only people fit for the truth! The masses are not fit for it! It must be diluted! Water it down a little!

Take the Sermon on the Mount and the Gita—they are simplicity itself Even the streetwalker can under stand them How grand! In them you find the truth clearly and simply revealed But no the priests would not accept that truth can be found so directly They speak of two thousand heavens and two thousand hells If people follow their prescriptions they will go to heaven! If they do not obey the rules they will go to hell!

But the people shall learn the truth Some are afraid that if the full truth is given to all it will hurt them They should not be given the unqualified truth—so they say But the world is not much better off by compromising truth What worse can it be than it is already? Bring truth out! If it is real it will do good When people protest and propose other methods they only make apologies for witchcraft

India was full of it in Buddha s day There were the masses of people and they were debarred from all knowledge If just a word of the Vedas entered the ears of a man terrible punishment was visited upon him The priests had made a secret of the Vedas—the Vedas that contained the spiritual truths discovered by the an cient Hindus!

At last one man could bear it no more He had the brain the power and the heart—a heart as infinite as the broad sky He felt how the masses were being led by the priests and how the priests were glorying in their power and he wanted to do something about it He did not want any power over any one and he wanted

to break the mental and spiritual bonds of men His heart was large The heart many around us may have and we also want to help others But we do not have the brain we do not know the ways and means by which help can be given But this man had the brain to discover the means of breaking the bondages of souls He learned why men suffer and he found the way out of suffering He was a man of accomplishment he worked everything out he taught one and all without distinction and made them realise the peace of enlightenment This was the man Buddha

You know from Arnold s poem *The Light of Asia* how Buddha was born a prince and how the misery of the world struck him deeply how although brought up and living in the lap of luxury he could not find comfort in his personal happiness and security how he renounced the world leaving his princess and new born son behind how he wandered searching for truth from teacher to teacher and how he at last attained to enlightenment You know about his long mission his disciples his organisations You all know these things

Buddha was the triumph in the struggle that had been going on between the priests and the prophets in India One thing can be said for these Indian priests—they were not and never are intolerant of religion they never have persecuted religion Any man was allowed to preach against them Theirs is such a religion they never molested any one for his religious views But they suffered from the peculiar weaknesses of all priests they also sought power they also promulgated rules and regulations and made religion unnecessarily complicated and thereby undermined the strength of those who followed their religion

Buddha cut through all these excrescences He preached the most tremendous truths He taught the very gist of the philosophy of the Vedas to one and all

without distinction he taught it to the world at large because one of his great messages was the equality of man Men are all equal No concession there to any body! Buddha was the great preacher of equality Every man and woman has the same right to attain spirituality—that was his teaching The difference between the priests and the other castes he abolished Even the lowest were entitled to the highest attainments he opened the door of Nirvâna to one and all His teaching was bold even for India No amount of preaching can ever shock the Indian soul but it was hard for India to swallow Buddha s doctrine How much harder it must be for you!

His doctrine was this Why is there misery in our life? Because we are selfish We desire things for our selves—that is why there is misery What is the way out? The giving up of the self The self does not exist the phenomenal world all this that we perceive is all that exists There is nothing called soul underlying the cycle of life and death There is the stream of thought one thought following another in succession each thought coming into existence and becoming non existent at the same moment that is all there is no thinker of the thought no soul The body is changing all the time so is mind consciousness The self therefore is a delusion All selfishness comes of holding on to the self to this illusory self If we know the truth that there is no self then we will be happy and make others happy

This was what Buddha taught And he did not merely talk he was ready to give up his own life for the world He said If sacrificing an animal is good sacrificing a man is better and he offered himself as a sacrifice He said This animal sacrifice is another superstition God and soul are the two big superstitions God is only a superstition invented by the priests If there is a God as these Brahmins preach why is there

so much misery in the world? He is just like me a slave to the law of causation If he is not bound by the law of causation then why does he create? Such a God is not at all satisfactory There is the ruler in heaven that rules the universe according to his sweet will and leaves us all here to die in misery—he never has the goodness to look at us for a moment Our whole life is continuous suffering but this is not sufficient punishment—after death we must go to places where we have other punishments Yet we continually perform all kinds of rites and ceremonies to please this creator of the world!

Buddha said These ceremonials are all wrong There is but one ideal in the world Destroy all delusions what is true will remain As soon as the clouds are gone the sun will shine How to kill the self? Become perfectly unselfish ready to give up your life even for an ant Work not for any superstition not to please any God not to get any reward but because you are seeking your own release by killing your self Worship and prayer and all that these are all nonsense You all say I thank God —but where does He live? You do not know and yet you are all going crazy about God

Hindus can give up everything except their God To deny God is to cut off the very ground from under the feet of devotion Devotion and God the Hindus must cling to They can never relinquish these And here in the teaching of Buddha are no God and no soul—simply work What for? Not for the self for the self is a delusion We shall be ourselves when this delusion has vanished Very few are there in the world that can rise to that height and work for work s sake

Yet the religion of Buddha spread fast It was because of the marvellous love which for the first time in the history of humanity overflowed a large heart and

devoted itself to the service not only of all men but of all living things—a love which did not care for anything except to find a way of release from suffering for all beings

Man was loving God and had forgotten all about his brother man The man who in the name of God can give up his very life can also turn around and kill his brother man in the name of God That was the state of the world They would sacrifice the son for the glory of God would rob nations for the glory of God would kill thousands of beings for the glory of God would drench the earth with blood for the glory of God This was the first time they turned to the other God—man It is man that is to be loved It was the first wave of intense love for all men—the first wave of true unadulterated *wisdom—that starting from India gradually* inundated country after country north south east west

This teacher wanted to make truth shine as truth No softening no compromise no pandering to the priests the powerful the kings No bowing before superstitious traditions however hoary no respect for forms and books just because they came down from the distant past He rejected all scriptures all forms of religious practice Even the very language Sanskrit in which religion had been traditionally taught in India he rejected so that his followers would not have any chance to imbibe the superstitions which were associated with it

There is another way of looking at the truth we have been discussing the Hindu way We claim that Buddha s *great doctrine of selflessness can be better* understood if it is looked at in our way In the Upanishads there are already the great doctrine of the Âtman and the Brahman The Atman Self is the same as Brahman the Lord This Self is all that is It is the only reality Mâyâ delusion makes us see It as different There is one Self not many That one Self shines in

various forms Man is man s brother because all men are one A man is not only my brother say the Vedas he is myself Hurting any part of the universe I only hurt myself I am the universe It is a delusion that I think I am Mr So and so—that is the delusion

The more you approach your real Self the more this delusion vanishes The more all differences and divisions disappear the more you realise all as the one Divinity God exists but He is not the man sitting upon a cloud He is pure Spirit Where does He reside? Nearer to you than your very self He is the Soul How can you perceive God as separate and different from yourself? When you think of Him as some one separate from yourself you do not know Him He is you yourself That was the doctrine of the prophets of India

It is selfishness that you think that you see Mr So and so and that all the world is different from you You believe you are different from me You do not take any thought of me You go home and have your dinner and sleep If I die you still eat drink and are merry But you cannot really be happy when the rest of the world is suffering We are all one It is the delusion of separateness that is the root of misery Nothing exists but the Self there is nothing else

Buddha s idea is that there is no God only man himself He repudiated the mentality which underlies the prevalent ideas of God He found it made men weak and superstitious If you pray to God to give you everything who is it then that goes out and works? God comes to those who work hard God helps them that help themselves An opposite idea of God weakens our nerves softens our muscles makes us dependent Everything independent is happy everything dependent is miserable Man has infinite power within himself and he can realise it—he can realise himself as the one

infinite Self It can be done but you do not believe it You pray to God and keep your powder dry all the time

Buddha taught the opposite Do not let men weep Let them have none of this praying and all that God is not keeping shop With every breath you are praying in God I am talking that is a prayer You are listening that is a prayer Is there ever any movement of yours mental or physical in which you do not participate in the infinite Divine Energy? It is all a constant prayer If you call only a set of words prayer you make prayer superficial Such prayers are not much good they can scarcely bear any real fruit

Is prayer a magic formula by repeating which even if you do not work hard you gain miraculous results? No All have to work hard all have to reach the depths of that infinite Energy Behind the poor behind the rich *there is the same infinite Energy It is not that one* man works hard and another by repeating a few words achieves results This universe is a constant prayer If you take prayer in this sense I am with you Words are not necessary Better is silent prayer

The vast majority of people do not understand the meaning of this doctrine In India any compromise regarding the Self means that we have given power into the hands of the priests and have forgotten the great teachings of the prophets Buddha knew this so he brushed aside all the priestly doctrines and practices and made man stand on his own feet It was necessary for him to go against the accustomed ways of the people he had to bring about revolutionary changes As a result this sacrificial religion passed away from India for ever and was never revived

Buddhism apparently has passed away from India but *really it has not There was an element of danger* in the teaching of Buddha—it was a reforming religion In order to bring about the tremendous spiritual change

he did he had to give many negative teachings But if a religion emphasises the negative side too much it is in danger of eventual destruction Never can a reforming sect survive if it is only reforming the formative elements alone—the real impulse that is the principles—live on and on After a reform has been brought about it is the positive side that should be emphasised after the build ing is finished the scaffolding must be taken away

It so happened in India that as time went on the followers of Buddha emphasised the negative aspect of his teachings too much and thereby caused the eventual downfall of their religion The positive aspects of truth were suffocated by the forces of negation and thus India repudiated the destructive tendencies that flourished in the name of Buddhism That was the decree of the Indian national thought

The negative elements of Buddhism—there is no God and no soul—died out I can say that God is the only being that exists it is a very positive statement He is the one reality When Buddha says there is no soul I say Man thou art one with the universe thou art all things How positive! The reformative element died out but the formative element has lived through all time Buddha taught kindness towards lower beings and since then there has not been a sect in India that has not taught charity to all beings even to animals This kindness this mercy this charity—greater than any doctrine—are what Buddhism left to us

The life of Buddha has an especial appeal All my life I have been very fond of Buddha but not of his doctrine I have more veneration for that character than for any other—that boldness that fearlessness and that tremendous love! He was born for the good of men Others may seek God others may seek truth for themselves he did not even care to know truth for himself He sought truth because people were in misery

How to help them that was his only concern Through out his life he never had a thought for himself How can we ignorant selfish narrow minded human beings ever understand the greatness of this man?

And consider his marvellous brain! No emotionalism That giant brain never was superstitious Believe not because an old manuscript has been produced because it has been handed down to you from your forefathers because your friends want you to—but think for yourself search truth for yourself realise it yourself Then if you find it beneficial to one and many give it to people Soft brained men weak minded chicken hearted cannot find the truth One has to be free and as broad as the sky One has to have a mind that is crystal clear only then can truth shine in it We are so full of superstitions! Even in your country where you think you are highly educated how full of narrow nesses and superstitions you are! Just think with all your claims to civilisation in this country on one occasion I was refused a chair to sit on because I was a Hindu

Six hundred years before the birth of Christ at the time when Buddha lived the people of India must have had wonderful education Extremely free minded they must have been Great masses followed him Kings gave up their thrones queens gave up their thrones People were able to appreciate and embrace his teaching so revolutionary so different from what they had been taught by the priests through the ages But their minds have been unusually free and broad

And consider his death If he was great in life he was also great in death He ate food offered to him by a member of a race similar to your American Indians Hindus do not touch them because they eat everything indiscriminately He told his disciples Do not eat this food but I cannot refuse it Go to the man and tell him he has done me one of the greatest services of my

life—he has released me from the body An old man came and sat near him—he had walked miles and miles to see the Master—and Buddha taught him When he found a disciple weeping he reproved him saying What is this? Is this the result of all my teaching? Let there be no false bondage no dependence on me no false glorification of this passing personality The Buddha is not a person he is a realisation Work out your own salvation

Even when dying he would not claim any distinction for himself I worship him for that What you call Buddhas and Christs are only the names of certain states of realisation Of all the teachers of the world he was the one who taught us most to be self reliant who freed us not only from the bondages of our false selves but from dependence on the invisible being or beings called God or gods He invited every one to enter into that state of freedom which he called Nirvana All must attain to it one day and that attainment is the complete fulfilment of man

## DISCIPLESHIP

*(Delivered in San Francisco on March 29 1900)*

My subject is Discipleship I do not know how *you will take what I have to say It will be rather diffi*cult for you to accept it—the ideals of teachers and disciples in this country vary so much from those in ours An old proverb of India comes to my mind There are hundreds of thousands of teachers but it is hard to find one disciple It seems to be true The one important thing in the attainment of spirituality is the attitude of the pupil When the right attitude is there illumination comes easily

What does the disciple need in order to receive the truth? The great sages say that to attain truth takes but the twinkling of an eye—it is just a question of knowing The dream breaks—how long does it take? In a second the dream is gone When the illusion vanishes how long does it take? Just the twinkling of an eye When I know the truth nothing happens except that the falsehood vanishes away I took the rope for the snake and now I see it is the rope It is only a question of half a second and the whole thing is done Thou art That Thou art the Reality How long does it take to know this? If we are God and always have been so not to know this is most astonishing To know this is the only natural thing It should not take ages to find out what we have always been and what we now are

*Yet it seems difficult to realise this self evident truth* Ages and ages pass before we begin to catch a faint glimpse of it God is life God is truth We write about this we feel in our inmost heart that this is so that everything else than God is nothing—here today gone tomorrow And yet most of us remain the same all through

life We cling to untruth and we turn our back upon truth We do not want to attain truth We do not want anyone to break our dream You see the teachers are not wanted Who wants to learn? But if anyone wants to realise the truth and overcome illusion if he wants to receive the truth from a teacher he must be a true disciple

It is not easy to be a disciple great preparations are necessary many conditions have to be fulfilled Four principal conditions are laid down by the Vedantists

The first condition is that the student who wants to know the truth must give up all desires for gain in this world or in the life to come

The truth is not what we see What we see is not truth as long as any desire creeps into the mind God is true and the world is not true So long as there is in the heart the least desire for the world truth will not come Let the world fall to ruin around my ears I do not care So with the next life I do not care to go to heaven What is heaven? Only the continuation of this earth We would be better and the little foolish dreams we are dreaming would break sooner if there were no heaven no continuation of this silly life on earth By going to heaven we only prolong the miserable illusions

What do you gain in heaven? You become gods drink nectar and get rheumatism There is less misery there than on earth but also less truth The very rich can understand truth much less than the poorer people It is easier for a camel to go through the eye of a needle than for a rich man to enter into the kingdom of God The rich man has no time to think of anything beyond his wealth and power his comforts and indulgences The rich rarely become religious Why? Because they think if they become religious they will have no more fun in life In the same way there is very little chance

to become spiritual in heaven there is too much comfort and enjoyment there—the dwellers in heaven are disinclined to give up their fun

They say there will be no more weeping in heaven I do not trust the man who never weeps he has a big block of granite where the heart should be It is evident that the heavenly people have not much sympathy There are vast masses of them over there and we are miserable creatures suffering in this horrible place They could pull us all out of it but they do not They do not weep There is no sorrow or misery there therefore they do not care for anyone s misery They drink their nectar dances go on beautiful wives and all that

Going beyond these things the disciple should say I do not care for anything in this life nor for all the heavens that have ever existed—I do not care to go to any of them I do not want the sense life in any form —this identification of myself with the body As I feel now I am this body—this huge mass of flesh This is what I feel I am I refuse to believe that

The world and the heavens all these are bound up with the senses You do not care for the earth if you do not have any senses Heaven also is the world Earth heaven and all that is between have but one name —earth

Therefore the disciple knowing the past and the present and thinking of the future knowing what prosperity means what happiness means gives up all these and seeks to know the truth and truth alone This is the first condition

The second condition is that the disciple must be able to control the internal and the external senses and must be established in several other spiritual virtues

The external senses are the visible organs situated in different parts of the body the internal senses are intangible We have the external eyes ears nose and

so on and we have the corresponding internal senses We are continually at the beck and call of both these groups of senses Corresponding to the senses are sense objects If any sense objects are near by the senses compel us to perceive them we have no choice or independence There is the big nose A little fragrance is there I have to smell it If there were a bad odour I would say to myself Do not smell it but nature says Smell and I smell it Just think what we have become! We have bound ourselves I have eyes Anything going on good or bad I must see It is the same with hearing If anyone speaks unpleasantly to me I must hear it My sense of hearing compels me to do so and how miserable I feel! Curse or praise—man has got to hear I have seen many deaf people who do not usually hear but anything about themselves they always hear!

All these senses external and internal must be under the disciple s control By hard practice he has to arrive at the stage where he can assert his mind against the senses against the commands of nature He should be able to say to his mind You are mine I order you do not see or hear anything and the mind will not see or hear anything—no form or sound will react on the mind In that state the mind has become free of the domination of the senses has become separated from them No longer is it attached to the senses and the body The external things cannot order the mind now the mind refuses to attach itself to them Beautiful fragrance is there The disciple says to the mind Do not smell and the mind does not perceive the fragrance When you have arrived at that point you are just beginning to be a disciple That is why when everybody says I know the truth I say If you know the truth you must have self control and if you have control of yourself show it by controlling these organs

Next the mind must be made to quiet down It is rushing about Just as I sit down to meditate all the vilest subjects in the world come up The whole thing is nauseating Why should the mind think thoughts I do not want it to think? I am as it were a slave to the mind No spiritual knowledge is possible so long as the mind is restless and out of control The disciple has to learn to control the mind Yes it is the function of the mind to think But it must not think if the disciple does not want it to it must stop thinking when he commands it to To qualify as a disciple this state of the mind is very necessary

Also the disciple must have great power of endurance Life seems comfortable and you find the mind behaves well when everything is going well with you But if something goes wrong your mind loses its balance That is not good Bear all evil and misery without one murmur of hurt without one thought of unhappiness resistance remedy or retaliation That is true endurance and that you must acquire

Good and evil there always are in the world Many forget there is any evil—at least they try to forget—and when evil comes upon them they are overwhelmed by it and feel bitter There are others who deny that there is any evil at all and consider everything good That also is a weakness that also proceeds from a fear of evil If something is evil smelling why sprinkle it with rose water and call it fragrant? Yes there are good and evil in the world—God has put evil in the world But you do not have to whitewash Him Why there is evil is none of your business Please have faith and keep quiet

When my Master Shri Ramakrishna fell ill a Brahmin suggested to him that he apply his tremendous mental power to cure himself he said that if my Master would only concentrate his mind on the diseased part of the body it would heal Shri Ramakrishna answered

What! Bring down the mind that I ve given to God to this little body! He refused to think of body and illness His mind was continually conscious of God it was dedicated to Him utterly He would not use it for any other purpose

This craving for health wealth long life and the like —the so called good—is nothing but an illusion To devote the mind to them in order to secure them only strengthens the delusion We have these dreams and illusions in life and we want to have more of them in the life to come in heaven More and more illusion Resist not evil Face it! You are higher than evil

There is this misery in the world—it has to be suffered by someone You cannot act without making evil for somebody And when you seek worldly good you only avoid an evil which must be suffered by some body else Everyone is trying to put it on someone else s shoulders The disciple says Let the miseries of the world come to me I shall endure them all Let others go free

Remember the man on the cross He could have brought legions of angels to victory but he did not resist He pitied those who crucified him He endured every humiliation and suffering He took the burden of all upon himself Come unto me all ye that labour and are heavy laden and I will give you rest Such is true endurance How very high he was above this life so high that we cannot understand it we slaves! No sooner does a man slap me in the face than my hand hits back bang it goes! How can I understand the greatness and blessedness of the Glorified One? How can I see the glory of it?

But I will not drag the ideal down I feel I am the body resisting evil If I got a headache I go all over the world to have it cured I drink two thousand bottles of medicine How can I understand these marvellous

minds? I can see the ideal but how much of that ideal? None of this consciousness of the body of the little self of its pleasures and pains its hurts and comforts none of these can reach that atmosphere By thinking only of the spirit and keeping the mind out of matter all the time I can catch a glimpse of that ideal Material thought and forms of the sense world have no place in that ideal Take them off and put the mind upon the spirit Forget your life and death your pains and pleasures your name and fame and realise that you are neither body nor mind but the pure spirit

When I say I I mean this spirit Close your eyes and see what picture appears when you think of your I Is it the picture of your body that comes or of your mental nature? If so you have not realised your true I yet The time will come however when as soon as you say I you will see the universe the infinite being Then you will have realised your true Self and found that you are infinite That is the truth you are the spirit you are not matter There is such a thing as illusion—in it one thing is taken for another matter is taken for spirit this body for soul That is the tremendous illusion It has to go

The next qualification is that the disciple must have faith in the Guru (teacher) In the West the teacher simply gives intellectual knowledge that is all The relationship with the teacher is the greatest in life My dearest and nearest relative in life is my Guru next my mother then my father My first reverence is to the Guru If my father says Do this and my Guru says Do not do this I do not do it The Guru frees my soul The father and mother give me this body but the Guru gives me rebirth in the soul

We have certain peculiar beliefs One of these is that there are some souls a few exceptional ones who are already free and who will be born here for the good

of the world to help the world They are free already they do not care for their own salvation—they want to help others They do not require to be taught anything From their childhood they know everything they may speak the highest truth even when they are babies six months old

Upon these free souls depends the spiritual growth of mankind They are like the first lamps from which other lamps are lighted True the light is in everyone but in most men it is hidden The great souls are shining lights from the beginning Those who come in contact with them have as it were their own lamps lighted By this the first lamp does not lose anything yet it communicates its light to other lamps A million lamps are lighted but the first lamp goes on shining with undiminished light The first lamp is the Guru and the lamp that is lighted from it is the disciple The second in turn becomes the Guru and so on These great ones whom you call Incarnations of God are mighty spiritual giants They come and set in motion a tremendous spiritual current by transmitting their power to their immediate disciples and through them to generation after generation of disciples

A bishop in the Christian Church by the laying on of hands claims to transmit the power which he is supposed to have received from the preceding bishops The bishop says that Jesus Christ transmitted his power to his immediate disciples and they to others and that that is how the Christ s power has come to him We hold that every one of us not bishops only ought to have such power There is no reason why each of you cannot be a vehicle of the mighty current of spirituality

But first you must find a teacher a true teacher and you must remember that he is not just a man You may get a teacher in the body but the real teacher is not in the body he is not the physical man—he is not as he

appears to your eyes It may be the teacher will come to you as a human being and you will receive the power from him Sometimes he will come in a dream and *transmit things to the world* The power of the teacher may come to us in many ways But for us ordinary mortals the teacher must come and our preparation must go on till he comes

We attend lectures and read books argue and reason about God and soul religion and salvation These are not spirituality because spirituality does not exist in books or in theories or in philosophies It is not in learning or reasoning but in actual inner growth Even parrots can learn things by heart and repeat them If you become learned what of it? Asses can carry whole libraries So when real light will come there will be no more of this learning from books—no book learning The man who cannot write even his own name can be perfectly religious and the man with all the libraries of the world in his head may fail to be Learning is not a condition of spiritual growth scholarship is not a condition The touch of the Guru the transmittal of spiritual energy will quicken your heart Then will begin the growth That is the real baptism by fire No more stopping You go on and go on

Some years ago one of your Christian teachers a friend of mine said You believe in Christ? Yes I answered but perhaps with a little more reverence Then why don t you be baptised? How could I be baptised? By whom? Where is the man who can give true baptism? What is baptism? Is it sprinkling some water over you or dipping you in water while muttering formulas?

Baptism is the direct introduction into the life of the spirit If you receive the real baptism you know you are not the body but the spirit Give me that baptism if you can If not you are not Christians Even after the

so called baptism which you received you have remained the same What is the sense of merely saying you have been baptised in the name of the Christ? Mere talk talk —ever disturbing the world with your foolishness! Ever steeped in the darkness of ignorance yet considering themselves wise and learned the fools go round and round staggering to and fro like the blind led by the blind [1] Therefore do not say you are Christians do not brag about baptism and things of that sort

Of course there is true baptism—there was baptism in the beginning when the Christ came to the earth and taught The illumined souls the great ones that come to the earth from time to time have the power to reveal the Supernal Vision to us This is true baptism You see before the formulas and ceremonies of every religion there exists the germ of universal truth In course of time this truth becomes forgotten it becomes as it were strangled by forms and ceremonies The forms remain—we find there the casket with the spirit all gone You have the form of baptism but few can evoke the living spirit of baptism The form will not suffice If we want to gain the living knowledge of the living truth we have to be truly initiated into it That is the ideal

The Guru must teach me and lead me into light make me a link in that chain of which he himself is a link The man in the street cannot claim to be a Guru The Guru must be a man who has known has actually realised the Divine truth has perceived himself as the spirit A mere talker cannot be the Guru A talkative fool like me can talk much but cannot be the Guru A true Guru will tell the disciple Go and sin no more and no more can he sin—no more has the person the power to sin

*I have seen such men in this life I have read the*

[1] Katha Upanishad I ii 5

Bible and all such books they are wonderful But the living power you cannot find in the books The power that can transform life in a moment can be found only in the living illumined souls those shining lights who appear among us from time to time They alone are fit to be Gurus You and I are only hollow talk talk not teachers We are disturbing the world more by talking making bad vibrations We hope and pray and struggle on and the day will come when we shall arrive at the truth and we shall not have to speak

The teacher was a boy of sixteen he taught a man of eighty Silence was the method of the teacher and the doubts of the disciple vanished for ever [1] That is the Guru Just think if you find such a man what faith and love you ought to have for that person! Why he is God Himself nothing less than that! That is why Christ s disciples worshipped him as God The disciple must worship the Guru as God Himself All a man can know is the living God God as embodied in man until he himself has realised God How else would he know God?

Here is a man in America born nineteen hundred years after Christ who does not even belong to the same race as Christ the Jewish race He has not seen Jesus or his family He says Jesus was God If you do not believe it you will go to hell We can understand how the disciples believed it—that Christ was God he was their Guru and they must have believed he was God But what has this American got to do with the man born nineteen hundred years ago? This young man tells me that I do not believe in Jesus and therefore I shall have to go to hell What does he know of Jesus? He is fit for a lunatic asylum This kind of belief won t do He will have to find his Guru

Jesus may be born again may come to you Then

[1] *Dakshinamurti stotram* 12 (adapted)

if you worship him as God you are all right We must all wait till the Guru comes and the Guru must be wor shipped as God He is God he is nothing less than that As you look at him the Guru gradually melts away and what is left? The Guru picture gives place to God Himself The Guru is the bright mask which God wears in order to come to us As we look steadily on gradually the mask falls off and God is revealed

I bow to the Guru who is the embodiment of the Bliss Divine the personification of the highest knowledge and the giver of the greatest beatitude who is pure per fect one without a second eternal beyond pleasure and pain beyond all thought and all qualification transcen dental Such is in reality the Guru No wonder the disciple looks upon him as God Himself and trusts him reveres him obeys him follows him unquestioningly This is the relation between the Guru and the disciple

The next condition the disciple must fulfil is to con ceive an extreme desire to be free

We are like moths plunging into the flaming fire knowing that it will burn us knowing that the senses only burn us that they only enhance desire Desire is never satiated by enjoyment enjoyment only increases desire as butter fed into fire increases the fire [1] Desire is increas-ed by desire Knowing all this people still plunge into it all the time Life after life they have been going after the objects of desire suffering extremely in conse quence yet they cannot give up desire Even religion which should rescue them from this terrible bondage of desire they have made a means of satisfying desire Rarely do they ask God to free them from bondage to the body and senses from slavery to desires Instead they pray to Him for health and prosperity for long life O God cure my headache give me some money or something!

Bhagavata IX xix 14

The circle of vision has become so narrow so degraded so beastly so animal! None is desiring any thing beyond this body Oh the terrible degradation the terrible misery of it! What little flesh the five senses the stomach! What is the world but a combination of stomach and sex? Look at millions of men and women —that is what they are living for Take these away from them and they will find their life empty meaningless and intolerable Such are we And such is our mind it is continually hankering for ways and means to satisfy the hunger of the stomach and sex All the time this is going on There is also endless suffering these desires of the body bring only momentary satisfaction and end less suffering It is like drinking a cup of which the surface layer is nectar while underneath all is poison But we still hanker for all these things

What can be done? Renunciation of the senses and desires is the only way out of this misery If you want to be spiritual you must renounce This is the real test Give up the world—this nonsense of the senses There is only one real desire to know what is true to be spiritual No more materialism no more this egoism I must become spiritual Strong intense must be the desire If a man s hands and feet were so tied that he could not move and then if a burning piece of charcoal were placed on his body he would struggle with all his power to throw it off When I shall have that sort of extreme desire that restless struggle to throw off this burning world then the time will have come for me to glimpse the Divine truth

Look at me If I lose my little pocketbook with two or three dollars in it I go twenty times into the house to find that pocketbook The anxiety the worry and the struggle! If one of you crosses me I remember it twenty years I cannot forgive and forget it For the little things of the senses I can struggle like that Who

is there that struggles for God that way? Children forget everything in their play The young are mad after the enjoyment of the senses they do not care for anything else The old are brooding over their past misdeeds (Shankara) They are thinking of their past enjoyments—old men that cannot have any enjoyment Chewing the cud—that is the best they can do None crave for the Lord in the same intense spirit with which they crave for the things of the senses

They all say that God is the Truth the only thing that really exists that spirit alone is not matter Yet the things they seek of God are rarely spirit They ask always for material things In their prayers spirit is not separated from matter Degradation—that is what religion has turned out to be The whole thing is becoming sham And the years are rolling on and nothing spiritual is being attained But man should hunger for one thing alone the spirit because spirit alone exists That is the ideal If you cannot attain it now say I cannot do it that is the ideal I know but I cannot follow it yet But that is not what you do You degrade religion to your low level and seek matter in the name of spirit You are all atheists You do not believe in anything except the senses So and so said such and such—there may be something in it Let us try and have the fun Possibly some benefit will come possibly my broken leg will get straight

Miserable are the diseased people they are great worshippers of the Lord for they hope that if they pray to Him He will heal them Not that that is altogether bad —if such prayers are honest and if they remember that that is not religion Shri Krishna says in the Gita (VII 16)

Four classes of people worship Me the distressed the seeker of material things the inquirer and the knower of truth People who are in distress approach God for relief If they are ill they worship Him to be healed

if they lose their wealth they pray to Him to get it back There are other people who ask Him for all kinds of things because they are full of desires—name fame wealth position and so on They will say O Virgin Mary I will make an offering to you if I get what I want If you are successful in granting my prayer I will worship God and give you a part of everything Men not so material as that but still with no faith in God feel inclined to know about Him They study philosophies read scriptures listen to lectures and so on They are the inquirers The last class are those who worship God and know Him All these four classes of people are good not bad All of them worship Him

But we are trying to be disciples Our sole concern is to know the highest truth Our goal is the loftiest We have said big words to ourselves—absolute realisation and all that Let us measure up to the words Let us worship the spirit in spirit standing on spirit Let the foundation be spirit the middle spirit the culmination spirit There will be no world anywhere Let it go and whirl into space—who cares? Stand thou in the spirit! That is the goal We know we cannot reach it yet Never mind Do not despair and do not drag the ideal down The important thing is how much less you think of the body of yourself as matter—as dead dull insentient matter how much more you think of yourself as shining immortal being The more you think of yourself as shining immortal spirit the more eager you will be to be absolutely free of matter body and senses This is the intense desire to be free

The fourth and last condition of discipleship is the discrimination of the real from the unreal There is only one thing that is real—God All the time the mind must be drawn to Him dedicated to Him God exists nothing else exists everything else comes and goes Any desire for the world is illusion because the world is

unreal More and more the mind must become conscious of God alone until everything else appears as it really is —unreal

These are the four conditions which one who wants to be a disciple must fulfil without fulfilling them he will not be able to come in contact with the true Guru And even if he is fortunate enough to find him he will not be quickened by the power that the Guru may transmit There cannot be any compromising of these conditions With the fulfilment of these conditions—with all these preparations—the lotus of the disciple s heart will open and the bee shall come Then the disciple knows that the Guru was within the body within himself He opens out He realises He crosses the ocean of life goes beyond He crosses this terrible ocean and in mercy without a thought of gain or praise he in his turn helps others to cross

# IS VEDANTA THE FUTURE RELIGION ?

*(Delivered in San Francisco on April 8 1900)*

Those of you who have been attending my lectures for the last month or so must by this time be familiar with the ideas contained in the Vedânta philosophy Vedanta is the most ancient religion of the world but it can never be said to have become popular Therefore the question Is it going to be the religion of the future? is very difficult to answer

At the start I may tell you that I do not know whether it will ever be the religion of the vast majority of men Will it ever be able to take hold of one whole nation such as the United States of America? Possibly it may However that is the question we want to discuss this afternoon

I shall begin by telling you what Vedanta is not and then I shall tell you what it is But you must remember that with all its emphasis on impersonal principles Vedanta is not antagonistic to anything though it does not compromise or give up the truths which it con iders fundamental

You all know that certain things are necessary to make a religion First of all there is the book The power of the book is simply marvellous! Whatever it be the book is the centre round which human allegiance gathers Not one religion is living today but has a book With all its rationalism and tall talk humanity still clings to the books In your country every attempt to start a religion without a book has failed In India sects rise with great success but within a few years they die down because there is no book behind them So in every other country

Study the rise and fall of the Unitarian movement It represents the best thought of your nation Why should it not have spread like the Methodist Baptist and other Christian denominations? Because there was no book On the other hand think of the Jews A hand ful of men driven from one country to another still hold together because they have a book Think of the Parsis—only a hundred thousand in the world About a million are all that remain of the Jains in India And do you know that these handfuls of Parsis and Jains still keep on just because of their books? The religions that are living at the present day—every one of them has a book

The second requisite to make a religion is vene ration for some person He is worshipped either as the Lord of the world or as the great Teacher Men must worship some embodied man! They must have the Incarnation or the prophet or the great leader You find it in every religion today Hindus and Christians—they have Incarnations Buddhists Mohammedans and Jews have prophets But it is all about the same—all their veneration twines round some person or persons

The third requisite seems to be that a religion to be strong and sure of itself must believe that it alone is the truth otherwise it cannot influence people

Liberalism dies because it is dry because it cannot rouse fanaticism in the human mind because it cannot bring out hatred for everything except itself That is why liberalism is bound to go down again and again It can influence only small numbers of people The reason is not hard to see Liberalism tries to make us unselfish But we do not want to be unselfish—we see no immediate gain in unselfishness we gain more by being selfish We accept liberalism as long as we are poor have nothing The moment we acquire money and power we turn very conservative The poor man

is a democrat When he becomes rich he becomes an aristocrat In religion too human nature acts in the same way

A prophet arises promises all kinds of rewards to those who will follow him and eternal doom to those who will not Thus he makes his ideas spread All existent religions that are spreading are tremendously fanatic The more a sect hates other sects the greater is its success and the more people it draws into its fold My conclusion after travelling over a good part of the world and living with many races and in view of the conditions prevailing in the world is that the present state of things is going to continue in spite of much talk of universal brotherhood

Vedanta does not believe in any of these teachings First it does not believe in a book—that is the difficulty to start with It denies the authority of any book over any other book It denies emphatically that any one book can contain all the truths about God soul the ultimate reality Those of you who have read the Upanishads remember that they say again and again Not by the reading of books can we realise the Self

Second it finds veneration for some particular person still more difficult to uphold Those of you who are students of Vedanta—by Vedanta is always meant the Upanishads—know that this is the only religion that does not cling to any person Not one man or woman has ever become the object of worship among the Vedantins It cannot be A man is no more worthy of worship than any bird any worm We are all brothers The difference is only in degree I am exactly the same as the lowest worm You see how very little room there is in Vedanta for any man to stand ahead of us and for us to go and worship him—he dragging us on and we being saved by him Vedanta does not give you that No book No man to worship Nothing

A still greater difficulty is about God You want to be democratic in this country It is the democratic God that Vedanta teaches

You have a government but the government is impersonal Yours is not an autocratic government and yet it is more powerful than any monarchy in the world Nobody seems to understand that the real power the real life the real strength is in the unseen the impersonal the nobody As a mere person separated from others you are nothing but as an impersonal unit of the nation that rules itself you are tremendous You are all one in the government—you are a tremendous power But where exactly is the power? Each man is the power There is no king I see everybody equally the same I have not to take off my hat and bow low to anyone Yet there is a tremendous power in each man

Vedanta is just that Its God is not the monarch sitting on a throne entirely apart There are those who like their God that way—a God to be feared and propitiated They burn candles and crawl in the dust before Him They want a king to rule them—they believe in a king in heaven to rule them all The king is gone from this country at least Where is the king of heaven now? Just where the earthly king is In this country the king has entered every one of you You are all kings in this country So with the religion of Vedanta You are all Gods One God is not sufficient You are all Gods says the Vedanta

This makes Vedanta very difficult It does not teach the old idea of God at all In place of that God who sat above the clouds and managed the affairs of the world without asking our permission who created us out of nothing just because He liked it and made us undergo all this misery just because He liked it Vedanta teaches the God that is in everyone has become everyone and everything His majesty the king has gone from

this country the Kingdom of Heaven went from Vedanta hundreds of years ago

*India cannot give up his majesty the king of the earth*—that is why Vedanta cannot become the religion of India There is a chance of Vedanta becoming the religion of your country because of democracy But it can become so only if you can and do clearly understand it if you become real men and women not people with vague ideas and superstitions in your brains and if you want to be truly spiritual since Vedanta is concerned only with spirituality

What is the idea of God in heaven? Materialism The Vedantic idea is the infinite principle of God embodied in every one of us God sitting up on a cloud! Think of the utter blasphemy of it! It is materialism—downright materialism When babies think this way it may be all right but when grown up men try to teach such things it is downright disgusting—that is what it is It is all matter all body idea the gross idea the sense idea Every bit of it is clay and nothing but clay Is that religion? It is no more religion than is the Mumbo Fumbo religion of Africa God is spirit and He should be worshipped in spirit and in truth Does spirit live only in heaven? What is spirit? We are all spirit Why is it we do not realise it? What makes you different from me? Body and nothing else Forget the body and all is spirit

These are what Vedanta has not to give No book No man to be singled out from the rest of mankind — You are worms and we are the Lord God! — none of that If you are the Lord God I also am the Lord God So Vedanta knows no sin There are mistakes but no sin and in the long run everything is going to be all right No Satan—none of this nonsense Vedanta believes in only one sin only one in the world and it is this the moment you think you are a sinner or

anybody is a sinner that is sin From that follows every other mistake or what is usually called sin There have been many mistakes in our lives But we are going on Glory be unto us that we have made mistakes! Take a long look at your past life If your present condition is good it has been caused by all the past mistakes as well as successes Glory be unto success! Glory be unto mistakes! Do not look back upon what has been done Go ahead!

You see Vedanta proposes no sin nor sinner No God to be afraid of He is the one being of whom we shall never be afraid because He is our own Self There is only one being of whom you cannot possibly be afraid He is that Then isn t it really the most superstitious person who has fear of God? There may be someone who is afraid of his shadow but even he is not afraid of himself God is man s very Self He is the one being whom you can never possibly fear What is all this nonsense the fear of the Lord entering into a man making him tremble and so on? Lord bless us that we are not all in the lunatic asylum! But if most of us are not lunatics why should we invent such ideas as fear of God? Lord Buddha said that the whole human race is lunatic more or less It is perfectly true it seems

No book no person no Personal God All these must go Again the senses must go We cannot be bound to the senses At present we are tied down—like persons dying of cold in the glaciers They feel such a strong desire to sleep and when their friends try to wake them warning them of death they say Let me die I want to sleep We all cling to the little things of the senses even if we are ruined thereby we forget there are much greater things

There is a Hindu legend that the Lord was once in carnated on earth as a pig He had a pig mate and in

course of time several little pigs were born to Him He was very happy with His family living in the mire squealing with joy forgetting His divine glory and lordship The gods became exceedingly concerned and came to the earth to beg Him to give up the pig body and return to heaven But the Lord would have none of that He drove them away He said He was very happy and did not want to be disturbed Seeing no other course the gods destroyed the pig body of the Lord At once He regained His divine majesty and was astonished that He could have found any joy in being a pig

People behave in the same way Whenever they hear of the Impersonal God they say What will become of my individuality?—my individuality will go! Next time that thought comes remember the pig and then think what an infinite mine of happiness you have each one of you How pleased you are with your present condition! But when you realise what you truly are you will be astonished that you were unwilling to give up your sense life What is there in your personality? Is it any better than that pig life? And this you do not want to give up! Lord bless us all!

What does Vedanta teach us? In the first place it teaches that you need not even go out of yourself to know the truth All the past and all the future are here in the present No man ever saw the past Did any one of you see the past? When you think you are knowing the past you only imagine the past in the present moment To see the future you would have to bring it down to the present which is the only reality—the rest is imagination This present is all that is There is only the One All is here right now One moment in infinite time is quite as complete and all inclusive as every other moment All that is and was and will be is here in the present Let anybody try to imagine anything outside of it—he will not succeed

What religion can paint a heaven which is not like this earth? And it is all art only this art is being made known to us gradually We with five senses look upon this world and find it gross having colour form sound and the like Suppose I develop an electric sense—all will change Suppose my senses grow finer—you will all appear changed If I change you change If I go beyond the power of the senses you will appear as spirit and God Things are not what they seem

We shall understand this by and by and then see it all the heavens—everything—are here now and they really are nothing but appearances on the Divine Pres ence This Presence is much greater than all the earths and heavens People think that this world is bad and imagine that heaven is somewhere else This world is not bad It is God Himself if you know it It is a hard thing even to understand harder than to believe The murderer who is going to be hanged tomorrow is all God perfect God It is very hard to understand surely but it can be understood

Therefore Vedanta formulates not universal brother hood but universal oneness I am the same as any other man as any animal—good bad anything It is one body one mind one soul throughout Spirit never dies There is no death anywhere not even for the body Not even the mind dies How can even the body die? One leaf may fall—does the tree die? The universe is my body See how it continues All minds are mine With all feet I walk Through all mouths I speak In everybody I reside

Why can I not feel it? Because of that individual ity that piggishness You have become bound up with this mind and can only be here not there What is im mortality? How few reply It is this very existence of ours! Most people think this is all mortal and dead—that God is not here that they will become immortal

by going to heaven They imagine that they will see God after death But if they do not see Him here and now they will not see Him after death Though they all believe in immortality they do not know that immortality is not gained by dying and going to heaven but by giving up this piggish individuality by not tying ourselves down to one little body Immortality is knowing ourselves as one with all living in all bodies perceiving through all minds We are bound to feel in other bodies than this one We are bound to feel in other bodies What is sympathy? Is there any limit to this sympathy this feeling in our bodies? It is quite possible that the time will come when I shall feel through the whole universe

What is the gain? The pig body is hard to give up we are sorry *to lose the enjoyment of our one little* pig body! Vedanta does not say Give it up it says Transcend it No need of asceticism—better would be the enjoyment of two bodies—better three Living in more bodies than one! When I can enjoy through the whole universe the whole universe is my body

There are many who feel horrified when they hear these teachings They do not like to be told that they are not just little pig bodies created by a tyrant God *I tell them Come up! They say they are born in sin* —they cannot come up except through someone s grace I say You are Divine! They answer You blasphemer how dare you speak so? How can a miserable creature be God? We are sinners! I get very much discouraged at times you know Hundreds of men and women tell me If there is no hell how can there be any religion? If these people go to hell of their own will who can prevent them?

Whatever you dream and think of you create If it is hell you die and see hell If it is evil and Satan you get a Satan If ghosts you get ghosts Whatever

you think that you become If you have to think think good thoughts great thoughts This taking for granted that you are weak little worms! By declaring we are weak we become weak we do not become better Suppose we put out the light close the windows and call the room dark Think of the nonsense! What good does it do me to say I am a sinner? If I am in the dark let me light a lamp The whole thing is gone Yet how curious is the nature of men! Though always conscious that the universal mind is behind their life they think more of Satan of darkness and lies You tell them the truth—they do not see it they like darkness better

This forms the one great question asked by Vedanta Why are people so afraid? The answer is that they have made themselves helpless and dependent on others We are so lazy we do not want to do anything for ourselves We want a Personal God a saviour or a prophet to do everything for us The very rich man never walks always goes in the carriage but in the course of years he wakes up one day paralysed all over Then he begins to feel that the way he had lived was not good after all No man can walk for me Every time one did it was to my injury If everything is done for a man by another he will lose the use of his own limbs Anything we do ourselves that is the only thing we do Anything that is done for us by another never can be ours You cannot learn spiritual truths from my lectures If you have learned anything I was only the spark that brought it out made it flash That is all the prophets and teachers can do All this running after help is foolishness

You know there are bullock carts in India Usually two bulls are harnessed to a cart and sometimes a sheaf of straw is dangled at the tip of the pole a little in front of the animals but beyond their reach The bulls try

continually to feed upon the straw but never succeed This is exactly how we are helped! We think we are going to get security strength wisdom happiness from the outside We always hope but never realise our hope Never does any help come from the outside

There is no help for man None ever was none is and none will be Why should there be? Are you not men and women? Are the lords of the earth to be helped by others? Are you not ashamed? You will be helped when you are reduced to dust But you are spirit Pull yourself out of difficulties by yourself! Save yourself by yourself! There is none to help you—never was To think that there is is sweet delusion It comes to no good

There came a Christian to me once and said You are a terrible sinner I answered Yes I am Go on He was a Christian missionary That man would not give me any rest When I see him I fly He said I have very good things for you You are a sinner and you are going to hell I replied Very good what else? I asked him Where are you going? I am going to heaven he answered I said I will go to hell That day he gave me up

Here comes a Christian man and he says You are all doomed but if you believe in this doctrine Christ will help you out If this were true—but of course it is nothing but superstition—there would be no wicked ness in the Christian countries Let us believe in it—believing costs nothing—but why is there no result? If I ask Why is it that there are so many wicked people? *they say We have to work more Trust in God* but keep your powder dry! Pray to God and let God come and help you out! But it is I who struggle pray and worship it is I who work out my problems—and God takes the credit This is not good I never do it

Once I was invited to a dinner The hostess asked

me to say grace I said I will say grace to you madam My grace and thanks are to you ' When I work I say grace to myself Praise be unto me that I worked hard and acquired what I have!

All the time you work hard and bless somebody else because you are superstitious you are afraid No more of these superstitions bred through thousands of years! It takes a little hard work to become spiritual Superstitions are all materialism because they are all based on the consciousness of body body body No spirit there Spirit has no superstitions—it is beyond the vain desires of the body

But here and there these vain desires are being projected even into the realm of the spirit I have attended several spiritualistic meetings In one the leader was a woman She said to me Your mother and grandfather come to me She said that they greeted her and talked to her But my mother is living yet! People like to think that even after death their relatives continue to exist in the same bodies and the spiritualists play on their superstitions I would be very sorry to know that my dead father is still wearing his filthy body People get consolation from this that their fathers are all encased in matter In another place they brought me Jesus Christ I said Lord how do you do? It makes me feel hopeless If that great saintly man is still wearing the body what is to become of us poor creatures? The spiritualists did not allow me to touch any of those gentlemen Even if these were real I would not want them I think Mother Mother! atheists—that is what people really are! Just the desire for these five senses! Not satisfied with what they have here they want more of the same when they die!

What is the God of Vedanta? He is principle not person You and I are all Personal Gods The absolute God of the universe the creator preserver and

destroyer of the universe is impersonal principle You and I the cat rat devil and ghost all these are Its persons—all are Personal Gods You want to worship Personal Gods It is the worship of your own self If you take my advice you will never enter any church Come out and go and wash off Wash yourself again and again until you are cleansed of all the superstitions that have clung to you through the ages Or perhaps you do not like to do so since you do not wash yourself so often in this country—frequent washing is an Indian custom not a *custom of your society*

I have been asked many times Why do you laugh so much and make so many jokes? I become serious sometimes—when I have stomach ache! The Lord is all blissfulness He is the reality behind all that exists He is the goodness the truth in everything You are His incarnations That is what is glorious The nearer you are to Him the less you will have occasions to cry or weep The farther we are from Him the more will long faces come The more we know of Him the more misery vanishes If one who lives in the Lord becomes miserable what is the use of living in Him? What is the use of such a God? Throw Him overboard into the Pacific Ocean! *We do not want Him!*

But God is the nfinite impersonal being—ever existent unchanging immortal fearless and you are all His incarnations His embodiments This is the God of Vedanta and His heaven is everywhere In this heaven dwell all the Personal Gods there are—you yourselves Exit praying and laying flowers in the temples!

*What do you pray for? To go to heaven to get* something and let somebody else not have it Lord I want more food! Let somebody else starve! What an idea of God who is the reality the infinite ever blessed existence in which there is neither part nor flaw who is ever free ever pure ever perfect! We attribute to Him

all our human characteristics functions and limitations He must bring us food and give us clothes As a matter of fact we have to do all these things ourselves and no body else ever did them for us That is the plain truth

But you rarely think of this You imagine there is God of whom you are special favourites who does things for you when you ask Him and you do not ask of Him favours for all men all beings but only for yourself your own family your own people When the Hindu is starving you do not care at that time you do not think that the God of the Christians is also the God of the Hindus Our whole idea of God our praying our worshipping all are vitiated by our ignorance our foolish idea of ourselves as body You may not like what I am saying You may curse me today but tomorrow you will bless me

We must become thinkers Every birth is painful We must get out of materialism My Mother would not let us get out of Her clutches nevertheless we must try This struggle is all the worship there is all the rest is mere shadow You are the Personal God Just now I am worshipping you This is the greatest prayer Worship the whole world in that sense—by serving it This standing on a high platform I know does not appear like worship But if it is service it is worship

The infinite truth is never to be acquired It is here all the time undying and unborn He the Lord of the universe is in every one There is but one temple—the body It is the only temple that ever existed In this body He resides the Lord of souls and the King of kings We do not see that so we make stone images of Him and build temples over them Vedanta has been in India always but India is full of these temples—and not only temples but also caves containing carved images The fool dwelling on the bank of the Ganga digs a well for water! Such are we! Living in the midst of God—we

must go and make images We project Him in the form of the image while all the time He exists in the temple of our body We are lunatics and this is the great delusion

Worship everything as God—every form is His temple All else is delusion Always look within never without Such is the God that Vedanta preaches and such is His worship Naturally there is no sect no creed no caste in Vedanta How can this religion be the national religion of India?

Hundreds of castes! If one man touches another man s food he cries out Lord help me I am polluted! When I returned to India after my visit to the West several orthodox Hindus raised a howl against my association with the Western people and my breaking the rules of orthodoxy They did not like me to teach the *truths of the Vedas to the people of the West*

But how can there be these distinctions and differences? How can the rich man turn up his nose at the poor man and the learned at the ignorant if we are all spirit and all the same? Unless society changes how can such a religion as Vedanta prevail? It will take thousands of years to have large numbers of truly rational human beings It is very hard to show men new *things to give them great ideas It is harder still to knock* off old superstitions very hard they do not die easily With all his education even the learned man becomes frightened in the dark—the nursery tales come into his mind and he sees ghosts

The meaning of the word Veda from which the word Vedanta comes is knowledge All knowledge is Veda infinite as God is infinite Nobody ever creates knowledge Did you *ever see knowledge created?* It is only discovered—what was covered is uncovered It is always here because it is God Himself Past present and future knowledge all exist in all of us We discover

it that is all All this knowledge is God Himself The Vedas are a great Sanskrit book In our country we go down on our knees before the man who reads the Vedas and we do not care for the man who is studying physics That is superstition it is not Vedanta at all It is utter materialism With God every knowledge is sacred Knowledge is God Infinite knowledge abides within every one in the fullest measure You are not really ignorant though you may appear to be so You are incarnations of God all of you You are the incarnations of the almighty omnipresent Divine Principle You may laugh at me now but the time will come when you will understand You must Nobody will be left behind

What is the goal? This that I have spoken of—Vedanta—is not a new religion So old—as old as God Himself It is not confined to any time and place it is everywhere Everybody knows this truth We are all working it out The goal of the whole universe is that This applies even to external nature—every atom is rushing towards that goal And do you think that any of the infinite pure souls are left without knowledge of the supreme truth? All have it all are going to the same goal—the discovery of the innate Divinity The maniac the murderer the superstitious man the man who is lynched in this country—all are travelling to the same goal Only that which we do ignorantly we ought to do knowingly and better

The unity of all existence—you all have it already within yourselves None was ever born without it However you may deny it it continually asserts itself What is human love? It is more or less an affirmation of that unity I am one with thee my wife my child my *friend!* Only *you* are affirming the unity *ignorantly* None ever loved the husband for the husband s sake but for the sake of the Self that is in the husband The

wife finds unity there The husband sees himself in the wife—instinctively he does it but he cannot do it knowingly consciously

The whole universe is one existence There cannot be anything else Out of diversities we are all going towards this universal existence Families into tribes tribes into races races into nations nations into humanity—how many wills going to the One! It is all knowledge all science—the realisation of this unity

Unity is knowledge diversity is ignorance This knowledge is your birthright I have not to teach it to you There never were different religions in the world We are all destined to have salvation whether we will it or not You have to attain it in the long run and become free because it is your nature to be free We are already free only we do not know it and we do not know what we have been doing Throughout all religious systems and ideals is the same morality one thing only is preached Be unselfish love others One says Because Jehovah commanded Allah shouted Mohammed Another cries Jesus If it was only the command of Jehovah how could it come to those who never knew Jehovah? If it was Jesus alone who gave this command how could any one who never knew Jesus get it? If only Vishnu how could the Jews get it who never were acquainted with that gentleman? There is another source greater than all of them Where is it? In the eternal temple of God in the souls of all beings from the lowest to the highest It is there—that infinite unselfishness infinite sacrifice infinite compulsion to go back to unity

We have seemingly been divided limited because of our ignorance and we have become as it were the little Mrs So and so and Mr So and so But all nature is giving this delusion the lie every moment I am not that little man or little woman cut off from all else I am the one universal existence The soul in its own

majesty is rising up every moment and declaring its own intrinsic Divinity

This Vedanta is everywhere only you must become conscious of it These masses of foolish beliefs and superstitions hinder us in our progress If we can let us throw them off and understand that God is spirit to be worshipped in spirit and in truth Try to be materialists no more! Throw away all matter! The conception of God must be truly spiritual All the different *ideas of God which are more or less materialistic must* go As man becomes more and more spiritual he has to throw off all these ideas and leave them behind As a matter of fact in every country there have always been a few who have been strong enough to throw away all matter and stand out in the shining light worshipping the spirit by the spirit

If Vedanta—this conscious knowledge that all is one spirit—spreads the whole of humanity will become spiritual But is it possible? I do not know Not within thousands of years The old superstitions must run out You are all interested in how to perpetuate all your superstitions Then there are the ideas of the family brother the caste brother the national brother All these are barriers to the realisation of Vedanta Religion has been religion to very few

Most of those who have worked in the field of religion all over the world have really been political workers That has been the history of human beings They have rarely tried to live up uncompromisingly to the truth They have always worshipped the god called society they have been mostly concerned with upholding what the masses believe—their superstitions their weakness They do not try to conquer nature but to fit into nature nothing else Go to India and preach a new creed—they will not listen to it But if you tell them it is from the Vedas—That is good! they will say Here I can preach this

doctrine and you—how many of you take me seriously? But the truth is all here and I must tell you the truth

There is another side to the question Everyone says that the highest the pure truth cannot be realised all at once by all that men have to be led to it gradually through worship prayer and other kinds of prevalent religious practices I am not sure whether that is the right method or not In India I work both ways

In Calcutta I have all these images and temples—in the name of God and the Vedas of the Bible and Christ and Buddha Let it be tried But on the heights of the Himalayas I have a place where I am determined nothing shall enter except pure truth There I want to work out this idea about which I have spoken to you to day There are an Englishman and an Englishwoman in charge of the place *The purpose is to train seekers* of truth and to bring up children without fear and with out superstition They shall not hear about Christs and Buddhas and Shivas and Vishnus—none of these They shall learn from the start to stand upon their own feet They shall learn from their childhood that God is the spirit and should be worshipped in spirit and in truth Everyone must be looked upon as spirit That is the ideal I do not know what success will come of it To day I am *preaching the thing I like* I wish I had been brought up entirely on that without all the dualistic superstitions

Sometimes I agree that there is some good in the dualistic method it helps many who are weak If a man wants you to show him the polar star you first point out to him a bright star near it then a less bright star then a dim star and then the polar star This process makes it easy for him to see it All the various practices and trainings Bibles and Gods are but the rudiments of religion the kindergartens of religion

But then I think of the other side How long will the

world have to wait to reach the truth if it follows this slow gradual process? How long? And where is the surety that it will ever succeed to any appreciable degree? It has not so far After all gradual or not gradual easy or not easy to the weak is not the dualistic method based on falsehood? Are not all the prevalent religious practices often weakening and therefore wrong? They are based on a wrong idea a wrong view of man Would two wrongs make one right? Would the lie become truth? Would darkness become light?

I am the servant of a man who has passed away I am only the messenger I want to make the experiment The teachings of Vedanta I have told you about were never really experimented with before Although Vedanta is the oldest philosophy in the world it has always become mixed up with superstitions and everything else

Christ said I and my father are one and you repeat it Yet it has not helped mankind For nineteen hundred years men have not understood that saying They make Christ the saviour of men He is God and we are worms! Similarly in India In every country this sort of belief is the backbone of every sect For thousands of years millions and millions all over the world have been taught to worship the Lord of the world the Incarnations the saviours the prophets They have been taught to consider themselves helpless miserable creatures and to depend upon the mercy of some person or persons for salvation There are no doubt many marvellous things in such beliefs But even at their best they are but kindergartens of religion and they have helped but little Men are still hypnotised into abject degradation However there are some strong souls who get over that illusion The hour comes when great men shall arise and cast off these kindergartens of religion and shall make vivid and powerful the true religion the worship of the spirit by the spirit

# WRITINGS PROSE AND POEMS

# STRUGGLE FOR EXPANSION[1]

The old dilemma whether the tree precedes the seed or the seed the tree runs through all our forms of knowledge Whether intelligence is first in the order of being or matter whether the ideal is first or the external manifestation whether freedom is our true nature or bondage of law whether thought creates matter or matter thought whether the incessant change in nature precedes the idea of rest or the idea of rest precedes the idea of change—all these are questions of the same insoluble nature Like the rise and fall of a series of waves they follow one another in an invariable succession and men take this side or that according to their tastes or education or peculiarity of temperaments

For instance if it be said on the one hand that seeing the adjustment in nature of different parts it is clear that it is the effect of intelligent work on the other hand it may be argued that intelligence itself being created by matter and force in the course of evolution could not have been before this world If it be said that the production of every form must be preceded by an ideal in the mind it can be argued with equal force that the ideal was itself created by various external experiences On the one hand the appeal is to our ever present idea of freedom on the other to the fact that nothing in the universe being causeless everything both mental and physical is rigidly bound by the law of causation If it be affirmed that seeing the changes of the body induced by volition it is evident that thought is the creator of this body it is equally clear that as change in the body induces a change in the thought the body must have

[1] Wr tt n by the Swam during his fi st visit to Ame ca in answ to qu tions put by a W ste n d sc ple

produced the mind If it be argued that the universal change must be the outcome of a preceding rest equally logical argument can be adduced to show that the idea of unchangeability is only an illusory relative notion brought about by the comparative differences in motion

Thus in the ultimate analysis all knowledge resolves itself into this vicious circle the indeterminate inter dependence of cause and effect Judging by the laws of reasoning such knowledge is incorrect and the most curious fact is that this knowledge is proved to be in correct not by comparison with knowledge which is true but by the very laws which depend for their basis upon the selfsame vicious circle It is clear therefore that the peculiarity of all our knowledge is that it proves its own insufficiency Again we cannot say that it is un real for all the reality we know and can think of is within this knowledge Nor can we deny that it is sufficient for all practical purposes This state of human knowledge which embraces within its scope both the external and the internal worlds is called Mâyâ It is unreal because it proves its own incorrectness It is real in the sense of being sufficient for all the needs of the animal man

Acting in the external world Maya manifests itself as the two powers of attraction and repulsion In the internal its manifestations are desire and non desire (Pravritti and Nivritti) The whole universe is trying to rush outwards Each atom is trying to fly off from its centre In the internal world each thought is trying to go beyond control Again each particle in the external world is checked by another force the centripetal and drawn towards the centre Similarly in the thought world the controlling power is checking all these out going desires

Desires of materialisation that is being dragged down more and more to the plane of mechanical action belong to the animal man It is only when the desire to

prevent all such bondage to the senses arises that religion dawns in the heart of man Thus we see that the whole scope of religion is to prevent man from falling into the bondage of the senses and to help him to assert his free dom The first effort of this power of Nivritti towards that end is called morality The scope of all morality is to prevent this degradation and break this bondage All morality can be divided into the positive and the negative elements it says either Do this or Do not do this When it says Do not it is evident that it is a check to a certain desire which would make a man a slave When it says Do its scope is to show the way to freedom and to the breaking down of a certain degradation which has already seized the human heart

Now this morality is only possible if there be a liberty to be attained by man Apart from the question of the chances of attaining perfect liberty it is clear that the whole universe is a case of struggle to expand or in other words to attain liberty This infinite space is not sufficient for even one atom The struggle for expansion must go on eternally until perfect liberty is attained It cannot be said that this struggle to gain freedom is to avoid pain or to attain pleasure The lowest grade of beings who can have no such feeling are also struggling for expansion and according to many man himself is the expansion of these very beings

# THE BIRTH OF RELIGION[1]

The beautiful flowers of the forest with their many coloured petals nodding their heads jumping leaping playing with every breeze the beautiful birds with their gorgeous plumage their sweet songs echoing through every forest glade—they were there yesterday my solace my companions and today they are gone—where? My playmates the companions of my joys and sorrows my pleasures and pastime—they also are gone—where? Those that nursed me when I was a child who all through their lives had but one thought for me—that of doing everything for me—they also are gone Every one everything is gone is going and will go Where do they go? This was the question that pressed for an answer in the mind of the primitive man Why so? you may ask Did he not see everything decomposed reduced to dust before him? Why should he have troubled his head at all about where they went?

To the primitive man everything is living in the first place and to him death in the sense of annihilation has no meaning at all People come to him go away and come again Sometimes they go away and do not come Therefore in the most ancient language of the world death is always expressed by some sort of going This is the beginning of religion Thus the primitive man was searching everywhere for a solution of his difficulty—where do they all go?

There is the morning sun radiant in his glory bringing light and warmth and joy to a sleeping world Slowly he travels and alas he also disappears down down below

[1] Written by the Swami during his first visit to America in answer to questions put by a Western disciple

but the *next day he appears again—glorious beautiful* And there is the lotus—that wonderful flower in the Nile the Indus and the Tigris the birth places of civilisation—opening in the morning as the solar rays strike its closed petals and with the waning sun shutting up again Some were there then who came and went and got up from their graves revivified This was the first solution The sun and the lotus are therefore the chief symbols in the most ancient religions Why these symbols?—because abstract thought whatever that be when expressed is bound to come clad in visible tangible gross garments This is the law The idea of the passing out as not out of existence but in it had to be expressed only as a change a momentary transformation and reflexively that object which strikes the senses and goes vibrating to the mind and calls up a new idea is bound to be taken up as the support the nucleus round which the new idea spreads itself for an expression And so the sun and the lotus were the first symbols

There are deep holes everywhere—so dark and so dismal down is all dark and frightful under water we cannot see open our eyes though we may up is light all light even at night the beautiful starry hosts shedding their light Where do they go then those I love? Not certainly down in the dark dark place but up above in the realm of Everlasting Light That required a new *symbol Here is fire with its glowing wonderful tongues* of flame—eating up a forest in a short time cooking the food giving warmth and driving wild animals away —this life giving life saving fire and then the flames—they all go upwards never downwards Here then was another—this fire that carries them upwards to the places of light—the connecting link between us and those that have passed over to the regions of light Thou Ignis begins the oldest human record our messenger to the bright ones So they put food and drink and whatever

they thought would be pleasing to these bright ones into the fire This was the beginning of sacrifice

So far the first question was solved at least as far as to satisfy the needs of these primitive men Then came the other question Whence has all this come? Why did it not come first? Because we remember a sudden change more happiness joy addition enjoy ment make not such a deep impression on our mind as unhappiness sorrow and subtraction Our nature is joy enjoyment pleasure and happiness Anything that violently breaks it makes a deeper impression than the natural course So the problem of death was the first to be solved as the great disturber Then with more advancement came the other question Whence they came? Everything that lives moves we move our will moves our limbs our limbs manufacture forms under the control of our will Everything then that moved had a will in it as the motor to the man child of ancient times as it is to the child man of the present day The wind has a will the cloud the whole of nature is full of separate wills minds and souls They are creating all this just as we manufacture many things they—the Devas the Elohims are the creators of all this

Now in the meanwhile society was growing up In society there was the king—why not among the bright ones the Elohims? Therefore there was a supreme Deva an Elohim Jahveh God of gods—the one God who by His single will has created all this—even the bright ones But as He has appointed different stars and planets so He has appointed different Devas or angels to preside over different functions of nature—some over death some over birth etc One supreme being supreme by being infinitely more powerful than the rest is the common conception in the two great sources of all religions the Aryan and Semitic races But here the Aryans take a new start a grand deviation

Their God was not only a supreme being but He was the Dyaus Pitar the Father in heaven This is the beginning of Love The Semitic God is only a thunderer only the terrible one the mighty Lord of hosts To all these the Aryan added a new idea that of a *Father* And the divergence becomes more and more obvious all through further progress which in fact stopped at this place in the Semitic branch of the human race The God of the Semitic is not to be seen—nay it is death to see Him the God of the Aryan can not only be seen but He is the goal of being the one aim of life is to see Him The Semitic obeys his King of kings for fear of punish ment and keeps His commandments The Aryan loves his father and further on he adds mother his friend And Love me love my dog they say So each one *of His creatures should be loved* because they are His To the Semitic this life is an outpost where we are posted to test our fidelity to the Aryan this life is on the way to our goal To the Semitic if we do our duty well we shall have an ever joyful home in heaven To the Aryan *that home is God Himself To the Semitic* serving God is a means to an end namely the pay which is joy and enjoyment To the Aryan enjoyment misery—everything—is a means and the end is God The Semitic worships God to go to heaven The Aryan rejects heaven to go to God In short this is the main difference The aim and end of the Aryan life is to see God to see the face of the Beloved because without Him he cannot live Without Thy presence the sun the moon and the stars lose their light

# FOUR PATHS OF YOGA[1]

Our main problem is to be free It is evident then that until we realise ourselves as the Absolute we cannot attain to deliverance Yet there are various ways of attaining to this realisation These methods have the generic name of Yoga (to join to join ourselves to our reality) These Yogas though divided into various groups can principally be classed into four and as each is only a method leading indirectly to the realisation of the Absolute they are suited to different temperaments Now it must be remembered that it is not that the assumed man becomes the real man or Absolute There is no becoming with the Absolute It is ever free ever perfect but the ignorance that has covered its nature for a time is to be removed Therefore the whole scope of all systems of Yoga (and each religion represents one) is to clear up this ignorance and allow the Âtman to restore its own nature The chief helps in this liberation are Abhyasa and Vairâgya Vairagya is non attachment to life be cause it is the will to enjoy that brings all this bondage in its train and Abhyasa is constant practice of any one of the Yogas

*Karma Yoga* Karma Yoga is purifying the mind by means of work Now if any work is done good or bad it must produce as a result a good or bad effect no power can stay it once the cause is present Therefore good action producing good Karma and bad action bad Karma the soul will go on in eternal bondage without ever hoping for deliverance Now Karma belongs only to the body or the mind never to the Âtman (Self) only it can cast a veil before the Atman

[1] Written by the Swami during his first visit to America in answer to questions put by a Western disciple

The veil cast by bad Karma is ignorance Good Karma has the power to strengthen the moral powers And thus it creates non attachment it destroys the tendency towards bad Karma and thereby purifies the mind But if the work is done with the intention of enjoyment it then produces only that very enjoyment and does not purify the mind or Chitta Therefore all work should be done without any desire to enjoy the fruits thereof All fear and all desire to enjoy here or hereafter must be banished for ever by the Karma Yogi Moreover this Karma without desire of return will destroy the selfishness which is the root of all bondage The watchword of the Karma Yogi is not I but Thou and no amount of self sacrifice is too much for him But he does this without any desire to go to heaven or gain name or fame or any other benefit in this world Although the explanation and rationale of this unselfish work is only in Jnâna Yoga yet the natural divinity of man makes him love all sacrifice simply for the good of others without any ulterior motive whatever his creed or opinion Again with many the bondage of wealth is very great and Karma Yoga is absolutely necessary for them as breaking the crystallisation that has gathered round their love of money

Next is *Bhakti Yoga* Bhakti or worship or love in some form or other is the easiest pleasantest and most natural way of man The natural state of this universe is attraction and that is surely followed by an ultimate disunion Even so love is the natural impetus of union in the human heart and though itself a great cause of misery properly directed towards the proper object it brings deliverance The object of Bhakti is God Love cannot be without a subject and an object The object of love again must be at first a being who can reciprocate our love Therefore the God of love must be in some sense a human God He must be a God of love Aside

from the question whether such a God exists or not it is a fact that to those who have love in their heart this Absolute appears as a God of love as personal

The lower forms of worship which embody the idea of God as a judge or punisher or someone to be obeyed through fear do not deserve to be called love although they are forms of worship gradually expanding into higher forms We pass on to the consideration of love itself We will illustrate love by a triangle of which the first angle at the base is fearlessness So long as there is fear it is not love Love banishes all fear A mother with her baby will face a tiger to save her child The second angle is that love never asks never begs The third or the apex is that love loves for the sake of love itself Even the idea of object vanishes Love is the only form in which love is loved This is the highest abstraction and the same as the Absolute

Next is *Raja Yoga* This Yoga fits in with every one of these Yogas It fits enquirers of all classes with or without any belief and it is the real instrument of religious enquiry As each science has its particular method of investigation so is this Raja Yoga the method of religion This science also is variously applied according to various constitutions The chief parts are the Prânâyâma concentration and meditation For those who believe in God a symbolical name such as Om or other sacred words received from a Guru will be very helpful Om is the greatest meaning the Absolute Meditating on the meaning of these holy names while repeating them is the chief practice

Next is *Jnâna Yoga* This is divided into three parts First hearing the truth—that the Atman is the only reality and that everything else is Mayâ (relativity) Second reasoning upon this philosophy from all points of view Third giving up all further argumentation and realising the truth This realisation comes from (1) being

certain that Brahman is real and everything else is un real (2) giving up all desire for enjoyment (3) controlling the sense and the mind (4) intense desire to be free Meditating on this reality always and reminding the soul of its real nature are the only ways in this Yoga It is the highest but most difficult Many persons get an intellectual grasp of it but very few attain realisation

# CYCLIC REST AND CHANGE[1]

This whole universe is a case of lost balance All motion is the struggle of the disturbed universe to regain its equilibrium which as such cannot be motion Thus in regard to the internal world it would be a state which is beyond thought for thought itself is a motion Now when all indication is towards perfect equilibrium by expansion and the whole universe is rushing towards it we *have* no *right to say that that state can never be* attained Again it is impossible that there should be any variety whatsoever in that state of equilibrium It must be homogeneous for as long as there are even two atoms they will attract and repel each other and disturb the balance Therefore this state of equilibrium is one of unity of rest and of homogeneity In the language of the internal this state of equilibrium is not thought nor body nor anything which we call an attribute The only thing which we can say it will retain is what is its own nature as existence self consciousness and blissfulness

This state in the same way cannot be two It must only be a unit and all fictitious distinctions of I thou etc all *the different variations must vanish as they* belong to the state of change or Mayâ It may be said that this state of change has come now upon the Self showing that before this it had the state of rest and liberty that at present the state of differentiation is the only real state and the state of homogeneity is the primitive crudeness out of which this changeful state is manufactured and it will be only degeneration to go back to the state of undifferentiation This argument

[1] Written by the Swami during his first visit to America in answer to questions put by a Western disciple

would have had some weight if it could be proved that these two states viz homogeneity and heterogeneity are the only two states happening but once through all time What happens once must happen again and again Rest is followed by change—the universe But that rest must have been preceded by other changes and this change will be succeeded by other rests It would be ridiculous to think that there was a period of rest and then came this change which will go on for ever Every particle in nature shows that it is coming again and again to periodic rest and change

This interval between one period of rest and another is called a Kalpa But this Kalpic rest cannot be one of perfect homogeneity for in that case there would be an end to any future manifestation Now to say that the present state of change is one of great advance in comparison to the preceding state of rest is simply absurd because in that case the coming period of rest being much more advanced in time must be much more perfect! There is no progression or digression in nature It is showing again and again the same forms In fact the word law means this But there is a progression with regard to souls That is to say the souls get nearer to their own natures and in each Kalpa large numbers of them get deliverance from being thus whirled around It may be said the individual soul being a part of the universe and nature returning again and again there cannot be any liberty for the soul for in that case the universe has to be destroyed The answer is that the individual soul is an assumption through Maya and it is no more a reality than nature itself In reality this individual soul is the unconditioned absolute Brahman (the Supreme)

All that is real in nature is Brahman only it appears to be this variety or nature through the superimposition of Maya Maya being illusion cannot be said to be real

yet it is producing the phenomena If it be asked how can Maya herself being illusion produce all this our answer is that what is produced being also ignorance the producer must also be that How can ignorance be produced by knowledge? So this Maya is acting in two ways as nescience and science (relative knowledge) and this science after destroying nescience or ignorance is itself also destroyed This Maya destroys herself and what remains is the Absolute the Essence of existence knowledge and bliss Now whatever is reality in nature is this Absolute and nature comes to us in three forms God conscious and unconscious i e God personal souls and unconscious beings The reality of all these is the Absolute through Maya it is seen to be diverse But the vision of God is the nearest to the reality and the highest The idea of a Personal God is the highest idea which man can have All the attributes attributed to God are true in the same sense as are the attributes of nature Yet we must never forget that the Personal God is the very Absolute seen through Maya

# A PREFACE TO THE IMITATION OF CHRIST[1]

*The Imitation of Christ* is a cherished treasure of the Christian world This great book was written by a Roman Catholic monk Written perhaps is not the proper word It would be more appropriate to say that each letter of the book is marked deep with the heart's blood of the great soul who had renounced all for his love of Christ That great soul whose words living and burning have cast such a spell for the last four hundred years over the hearts of myriads of men and women whose influence today remains as strong as ever and is destined to endure for all time to come before whose genius and Sadhanâ (spiritual effort) hundreds of crowned heads have bent down in reverence and before whose matchless purity the jarring sects of Christendom whose name is legion have sunk their differences of centuries in common veneration to a common principle—that great soul strange to say has not thought fit to put his name to a book such as this Yet there is nothing strange here after all for why should he? Is it possible for one who totally renounced all earthly joys and despised the desire for the bauble fame as so much dirt and filth—is it possible for such a soul to care for that paltry thing a mere author's name? Posterity however has guessed that the author was Thomas a Kempis a Roman Catholic monk How far the guess is true is known only to God But be he who he may that he deserves

[1] Translated from an original Bengali writing of the Swami in 1889 The passage is the preface to his Bengali translation of *The Imitation of Christ* which he contributed to a Bengali monthly He translated only six chapters with quotations of parallel passages from the Hindu scriptures

the world s adoration is a truth that can be gainsaid by none

We happen to be the *subjects* of a Christian Government now Through its favour it has been our lot to meet Christians of so many sects native as well as foreign How startling the divergence between their profession and practice! Here stands the Christian missionary preaching Sufficient unto the day is the evil thereof Take no thought for the morrow —and then busy soon after making his pile and framing his budget for ten years in advance! There he says that he follows him who hath not where to lay his head glibly talking of the glorious sacrifice and burning renunciation of the Master but in practice going about like a gay bridegroom fully enjoying all the comforts the world can bestow! Look where we may a true Christian nowhere do we see The ugly impression left on our mind by the ultra luxurious insolent despotic barouche and brougham driving Christians of the Protestant sects will be completely removed if we but once read this great book with the attention it deserves

All wise men think alike The reader while reading this book will hear the echo of the Bhagavad Gitâ over and over again Like the Bhagavad Gita it says Give up all Dharmas and follow Me The spirit of humility the panting of the distressed soul the best expression of Dâsya Bhakti (devotion as a servant) will be found imprinted on every line of this great book and the reader s heart will be profoundly stirred by the author s thoughts of burning renunciation marvellous surrender and deep sense of dependence on the will of God To those of my countrymen who under the influence of blind bigotry may seek to belittle this book because it is the work of a Christian I shall quote only one aphorism of *Vaisheshika Darshana* and say nothing more The aphorism is this आप्तोपदेशवाक्य शब्द —which means that the

teachings of Siddha Purushas (perfected souls) have a probative force and this is technically known as Shabda Pramâna (verbal evidence) Rishi Jaimini the commen tator says that such Âpta Purushas (authorities) may be born both among the Aryans and the Mlechchhas

If in ancient times Greek astronomers like Yavanâ chârya could have been so highly esteemed by our Aryan ancestors then it is incredible that this work of the lion of devotees will fail to be appreciated by my countrymen

Be that as it may we shall place the Bengali translation of this book before our readers *seriatim* We trust that the readers of Bengal will spend over it at least one hundredth part of the time they waste over cart loads of trashy novels and dramas

I have tried to make the translation as literal as possible but I cannot say how far I have succeeded The allusions to the Bible in several passages are given in the footnotes

# AN INTERESTING CORRESPONDENCE[1]

Now Sister Mary
You need not be sorry
For the hard raps I gave you
You know full well
Though you like me tell
With my whole heart I love you

The babies I bet
The best friends I met
Will stand by me in weal and woe
And so will I do
You know it too

Life name or fame even heaven forgo
For the sweet sisters four
*Sans reproche et sans peur*
The truest noblest steadfast best

In order to truly appreciate this correspondence the reader has to be informed of the occasion which gave rise to it and also to remember the relation that existed between the correspondents At the outset of the first letter the Swami speaks of the hard raps that he gave to his correspondent These were nothing but a very strong letter which he wrote to her in vindication of his position on the 1st February 1895 which will be found reproduced in the fifth volume of *The Complete Works* of the Swami It was a very beautiful letter full of the fire of a Sannyasin's spirit and we request our readers to go through it before they peruse the following text Mary Hale to whom the Swami wrote was one of the two daughters of Mr and Mrs Hale whom the Swami used to address as Father Pope and Mother Church The Misses Hale and their two cousins were like sisters to him and they also in their turn held the Swami in great love and reverence Some of the finest letters of the Swami were written to them

In the present correspondence the Swami is seen in a new light playful and intensely human yet keyed to the central theme of his life Brahmajnana The first letter was written from New York 15th February 1895 —Ed

The wounded snake its hood unfurls
The flame stirred up doth blaze
The desert air resounds the calls
Of heart struck lion s rage

The cloud puts forth its deluge strength
When lightning cleaves its breast
When the soul is stirred to its inmost depth
Great ones unfold their best

Let eyes grow dim and heart grow faint
And friendship fail and love betray
Let Fate its hundred horrors send
And clotted darkness block the way

All nature wear one angry frown
To crush you out—still know my soul
You are Divine March on and on
Nor right nor left but to the goal

Nor angel I nor man nor brute
Nor body mind nor he or she
The books do stop in wonder mute
To tell my nature I am He

Before the sun the moon the earth
Before the stars or comets free
Before e en time has had its birth
I was I am and I will be

The beauteous earth the glorious sun
The calm sweet moon the spangled sky
Causation s laws do make them run
They live in bonds in bonds they die

And mind its mantle dreamy net
Cast o er them all and holds them fast
In warp and woof of thought are set
Earth hells and heavens or worst or best

Know these are but the outer crust—
All space and time all effect cause
I am beyond all sense all thoughts
The witness of the universe

Not two or many tis but one
And thus in me all me s I have
I cannot hate I cannot shun
Myself from me I can but love

From dreams awake from bonds be free
Be not afraid This mystery
My shadow cannot frighten me
Know once for all that I am He

Well so far my poetry Hope you are all right Give my love to mother and Father Pope I am busy unto death and have almost no time to write even a line So excuse me if later on I am rather late in writing

Yours eternally
VIVEKANANDA

*Miss M B H sent Swami the following doggerel in reply*

The monk he would a poet be
And wooed the muse right earnestly
In thought and word he could well beat her
What bothered him though was the metre

His feet were all too short too long
The form not suited to his song
*He tried the sonnet lyric epic*
And worked so hard he waxed dyspeptic

While the poetic mania lasted
He e en from vegetables fasted
Which Leon had with tender care
Prepared for Swami s dainty fare

One day he sat and mused alone—
Sudden a light around him shone
The still small voice his thoughts inspire
And his words glow like coals of fire

And coals of fire they proved to be
Heaped on the head of contrite me—
My scolding letter I deplore
And beg forgiveness o er and o er

The lines you sent to your sisters four
*Be sure they ll cherish evermore*
For you have made them clearly see
The one main truth that all is He

*Then Swami*

In days of yore
On Ganga s shore preaching
A hoary priest was teaching
How Gods they come
As Sitâ Râm
And gentle Sitâ pining weeping
The sermons end
They homeward wend their way—
*The hearers musing thinking*

Leon Landsberg a d ciple of the Swami who lived with h m for some t me

When from the crowd
A voice aloud
This question asked beseeching seeking—
Sir tell me pray
Who were but they
These Sita Ram you were teaching speaking!

So Mary Hale
Allow me tell
You mar my doctrines wronging baulking
I never taught
Such queer thought
That all was God—unmeaning talking!

But this I say
Remember pray
That God is *true* all else is *nothing*
This world s a dream
Though true it seem
And only truth is *He* the living!
The real *me* is none but *He*
And never never *matter* changing!
With undying love and gratitude to you all

VIVEKANANDA

*And then Miss M B H*

The difference I clearly see
Twixt tweedledum and tweedledee—
That is a proposition sane
But truly tis beyond my vein
To make your Eastern logic plain

If God is truth all else is naught
This world a dream delusion up wrought
What can exist which God is not?

All those who many see have much to fear
He only lives to whom the One is clear
So again I say
In my poor way
I cannot see but that all s He
If I m in Him and He in me

*Then the Swami replied*

Of temper quick a girl unique
A freak of nature she
A lady fair no question there
Rare soul is Miss Mary
Her feelings deep she cannot keep
But creep they out at last
A spirit free I can foresee
Must be of fiery cast

Tho many a lay her muse can bray
And play piano too
Her heart so cool chills as a rule
The fool who comes to woo
Though Sister Mary I hear they say
The sway your beauty gains
Be cautious now and do not bow
However sweet to chains

For twill be soon another tune
The moon struck mate will hear
If his will but clash your words will hash
And smash his life I fear
These lines to thee Sister Mary
Free will I offer take
Tit for tat —a monkey chat
For monk alone can make

## THOU BLESSED DREAM[1]

If things go ill or well—
If joy redounding shows her face
Or seas of sorrow swell—
Tis but where each has part
Each one to weep or laugh as may
Each one his robe to don
Its scenes alternative shine and rain

Thou dream O blessed dream!
Spread near and far thy veil of haze
Tone down the lines so sharp
Make smooth what roughness seems

No magic but in thee!
Thy touch makes deserts bloom to life
Harsh thunder blessed song
Fell death the sweet release

## LIGHT[2]

I look behind and after
And find that all is right
In my deepest sorrows
There is a soul of light

[1] Written to Miss Christine Greenst del from P ris 17th August 1900
Vide *Complete Wo ks VI* p 441

## THE LIVING GOD[1]

He who is in you and outside you
Who works through all hands
Who walks on all feet
Whose body are all ye
Him worship and break all other idols!

He who is at once the high and low
The sinner and the saint
Both God and worm
Him worship—visible knowable real omnipresent
Break all other idols!

In whom is neither past life
Nor future birth nor death
In whom we always have been
And always shall be one
Him worship Break all other idols!

Ye fools! who neglect the living God
And His infinite reflections with which the world is full

While ye run after imaginary shadows
That lead alone to fights and quarrels
Him worship the only visible!
Break all other idols!

## TO AN EARLY VIOLET

What though thy bed be frozen earth
Thy cloak the chilling blast
What though no mate to cheer thy path
Thy sky with gloom o'ercast

Written to an American friend from Almora 9th July 1897
Written to a Western lady-disciple from New York 6th January 1896

What though if love itself doth fail
Thy fragrance strewed in vain
What though if bad o er good prevail
And vice o er virtue reign —

Change not thy nature gentle bloom
Thou violet sweet and pure
But ever pour thy sweet perfume
Unasked unstinted sure!

## TO MY OWN SOUL

Hold yet a while Strong Heart
Not part a lifelong yoke
Though blighted looks the present future gloom

And age it seems since you and I began our
March up hill or down Sailing smooth o er
Seas that are so rare—
Thou nearer unto me than oft times I myself—
Proclaiming mental moves before they were!

Reflector true—Thy pulse so timed to mine
Thou perfect note of thoughts however fine—
Shall we now part Recorder say?

In thee is friendship faith
For thou didst warn when evil thoughts were brewing—
And though alas thy warning thrown away
Went on the same as ever—good and true

## THE DANCE OF SHIVA[1]

Lo the Great God is dancing
—Shiva the all destroyer and Lord of creation
The Master of Yoga and the wielder of Pinaka [2]
His flaming locks have filled the sky
Seven worlds play the rhythm
As the trembling earth sways almos to dissolution
Lo the Great God Shiva is dancing

## SHIVA IN ECSTASY

Shiva is dancing lost in the ecstasy of Self sounding his own cheeks

His tabor is playing and the garland of skulls is swinging in rhythm

The waters of the Ganges are roaring among his matted locks

The great trident is vomiting fire and the moon on his forehead is fiercely flaming

## TO SHRI KRISHNA

*(A Song in Hindi)*

O Krishna my friend let me go to the water
O let me go today
Why play tricks with one who is already thy slave?
O friend let me go today let me go
I have to fill my pitcher in the waters of the Jumna
I pray with folded hands friend let me go

[1] This and the next one are translated from Bengali songs
[2] Trident

# A HYMN TO SHRI RAMAKRISHNA

*(In Sanskrit)*

ॐ ह्रीं ऋत त्वमचलो गुणजित् गुणेड्यो
नक्त दिव सकरुण तव पादपद्मम् ।
मोहङ्कष बहुकृत न भजे यतोऽह
तस्मात्त्वमेव शरण मम दीनबन्धो ॥१॥

1 Om! Hrim! Thou art the True the Imperturbable One transcending the three Gunas and yet adored for Thy virtues! Inasmuch as I do not worship day and night with yearning Thy compassionate lotus feet which destroy all ignorance therefore O Thou friend of the lowly Thou art my only refuge

भक्तिर्भगश्च भजन भवभेदकारि
गच्छन्त्यल सुविपुल गमनाय तत्त्वम् ।
वक्त्रोद्धृतन्तु हृदि मे न च भाति किंचित्
तस्मात्त्वमेव शरण मम दीनबन्धो ॥२॥

2 Spiritual powers reverence and worship which put an end to this cycle of birth and death are enough indeed to lead to the greatest Truth But this while finding utterance through the mouth is not at all being brought home to my heart Therefore O Thou friend of the lowly Thou art my only refuge

तेजस्तरन्ति तरसा त्वयि तृप्ततृष्णा
रागे कृते ऋतपथे त्वयि रामकृष्णे ।
मर्त्यामृत तव पद मरणोर्मिनाश
तस्मात्त्वमेव शरण मम दीनबन्धो ॥३॥

3 If devotion is directed to Thee O Ramakrishna the way of Divine Truth then with desires all fulfilled in Thee they forthwith cross over this sea of Rajas for Thy feet are like nectar to the mortals quelling the waves of death Therefore O Thou friend of the lowly Thou art my only refuge

कृत्य करोति कलुष कुहकान्तकारि
ष्णान्त शिव सुविमल तव नाम नाथ ।
यस्मादह त्वशरणो जगदेकगम्य
तस्मात्त्वमेव शरण मम दीनबन्धो ॥४॥

4 O Thou dispeller of illusion Thy name ending in shna pure and auspicious converts sinfulness to purity Because O Thou the only goal of all beings shelter have I none Thou art O friend of the lowly my only refuge

## A HYMN TO SHRI RAMAKRISHNA

*(In Sanskrit)*

आचण्डालाप्रतिहतरयो यस्य प्रेमप्रवाह
लोकातीतोऽप्यहह न जहौ लोककल्याणमार्गम् ।
त्रैलोक्येऽप्यप्रतिममहिमा जानकीप्राणबन्धो
भक्त्या ज्ञान वृतवरवपु सीतया यो हि राम ॥१॥

1 He who was Shri Rama whose stream of love flowed with resistless might even to the Chandala (the outcaste) Oh who ever was engaged in doing good to the world though superhuman by nature whose renown there is none to equal in the three worlds Sita s beloved whose body of Knowledge Supreme was covered by devotion sweet in the form of Sita

स्तम्भीकृत्य प्रलयकलित वाहवोत्थ महान्त
हित्वा रात्रि प्रकृतिसहजामन्धतामिस्रमिश्राम् ।
गीत शान्त मधुरमपि य सिंहनाद जगर्ज
सोऽय जात प्रथितपुरुषो रामकृष्णस्त्विदानीम् ।।२।।

2 He who quelled the noise terrible like that at the time of destruction arising from the battle (of Kuru kshetra) who destroyed the terrible yet natural night of ignorance (of Arjuna) and who roared out the Gita sweet and appeasing That renowned soul is born now as Shri Ramakrishna

नरदेव देव जय जय नरदेव ।
शक्तिसमुद्रसमुत्थतरङ्ग
दर्शितप्रेमविजृम्भितरङ्गम् ।।
सशयराक्षसनाशमहास्त्र
यामि गुरु शरण भववैद्यम् ।
नरदेव देव जय जय नरदेव ।।३।।

3 Hail O Lord of Men! Victory unto You! I surrender myself to my Guru the physician for the malady of Samsâra (relative existence) who is as it were a wave rising in the ocean of Shakti (Power) who has shown various sports of Love Divine and who is the weapon to destroy the demon of doubt

Hail O Lord of Men! Victory unto You!

नरदेव देव जय जय नरदेव ।
अद्वयतत्त्वसमाहितचित्त
प्रोज्ज्वलभक्तिपटावृतवृत्तम् ।।
कर्मकलेवरमद्भुतचेष्ट
यामि गुरु शरण भववैद्यम् ।
नरदेव देव जय जय नरदेव ।।४।।

4 Hail O Lord of Men! Victory unto You! I surrender myself to my Guru the Man God the physician for the malady of this Samsâra (relative existence) whose mind ever dwelt on the non dualistic Truth whose personality was covered by the cloth of Supreme Devo tion who was ever active (for the good of humanity) and whose actions were all superhuman

Hail O Lord of Men! Victory unto You!

## NO ONE TO BLAME[1]

The sun goes down its crimson rays
Light up the dying day
A startled glance I throw behind
And count my triumph shame
No one but me to blame

Each day my life I make or mar
Each deed begets its kind
Good good bad bad the tide once set
No one can stop or stem
No one but me to blame

I am my own embodied past
Therein the plan was made
The will the thought to that conform
To that the outer frame
No one but me to blame

Love comes reflected back as love
Hate breeds more fierce hate
They mete their measures lay on me
Through life and death their claim
No one but me to blame

[1] Written from New York 16th May 1895

I cast off fear and vain remorse
    I feel my Karma s sway
I face the ghosts my deeds have raised—
    Joy sorrow censure fame
        No one but me to blame

Good bad love hate and pleasure pain
    Forever linked go
I dream of pleasure without pain
    It never never came
        No one but me to blame

I give up hate I give up love
    My thirst for life is gone
Eternal death is what I want
    Nirvanam goes life s flame
        No one is left to blame

One only man one only God one ever perfect soul
One only sage who ever scorned the dark and dubious ways
One only man who dared think and dared show the goal—
That *death* is curse and so is *life* and best when stops to be

Om Nama Bhagavate Sambuddhâya
Om I salute the Lord the awakened

# NOTES OF CLASS TALKS AND LECTURES

# NOTES OF CLASS TALKS

## WHEN WILL CHRIST COME AGAIN?

I never take much notice of these things I have to deal with principles I have only to preach that God comes again and again and that He came in India as Krishna Râma and Buddha and that He will come again It can almost be demonstrated that after each 500 years the world sinks and a tremendous spiritual wave comes and on the top of the wave is a Christ

There is a great change now coming all over the world and this is a cycle Men are finding that they are losing hold of life which way will they turn down or up? Up certainly How can it be down ? Plunge into the breach fill up the breach with your body your life How should you allow the world to go down when you are living ?

## THE DIFFERENCE BETWEEN MAN AND CHRIST

There is much difference in manifested beings As a manifested being you will never be Christ Out of clay manufacture a clay elephant out of the same clay manufacture a clay mouse Soak them in water—they become one As clay they are eternally one as fashioned things they are eternally different The Absolute is the material of both God and Man As Absolute Omni present Being we are all one and as personal beings God is the eternal master and we are the eternal servants

You have three things in you (1) the body (2) the mind (3) the spirit The spirit is intangible the mind comes to birth and death and so does the body You are that spirit but often you think you are the body

When a man says I am here he thinks of the body Then comes another moment when you are on the highest plane you do not say I am here But if a man abuses you or curses you and you do not resent it you are the spirit When I think I am the mind I am one spark of that eternal fire which Thou art and when I feel that I am the spirit Thou and I are one —so says a devotee to the Lord Is the mind in advance of the spirit ?

God does not reason why should you reason if you knew? It is a sign of weakness that we have to go on crawling like worms to get a few facts and build generalisations and then the whole thing tumbles down again The spirit is reflected in the mind and everything It is the light of the spirit that makes the mind sensate Everything is an expression of the spirit the minds are so many mirrors What you call love and fear hatred virtue and vice are all reflections of the spirit only when the reflector is base the reflection is bad

### Are Christ and Buddha Identical ?

It is my particular fancy that the same Buddha became Christ Buddha prophesied I will come again in five hundred years and Christ came here in five hundred years These are the two Lights of the whole human nature Two men have been produced Buddha and Christ these are the two giants huge gigantic personalities two Gods Between them they divide the whole world Wherever there is the least knowledge in the world people bow down either to Buddha or Christ It would be very hard to produce more like them but I hope there will be Mohammed came five hundred years after five hundred years after came Luther with his Protestant wave and this is five hundred years after that again It is a great thing in a few thousand years to produce two such men as Jesus and Buddha Are not

two such enough ? Christ and Buddha were Gods the others were prophets Study the life of these two and see the manifestation of power in them—calm and non resisting poor beggars owning nothing without a cent in their pockets despised all their lives called heretic and fool—*and think of the immense spiritual power they have* wielded over humanity

### Salvation from Sin

We are to be saved from sin by being saved from ignorance Ignorance is the cause of which sin is the result

### Coming back to the Divine Mother

When a nurse takes a baby out into the garden and plays with the baby the Mother may send word to the baby to come *indoors The baby is absorbed in play* and says I won t come I do not want to eat After a while the baby becomes tired with his play and says I will go to Mother The nurse says Here is a new doll but the baby says I do not care for dolls any more I will go to Mother and he weeps until he goes We are all babies The Mother is God We are absorbed in seeking for money wealth and all these things but the time will come when we will awaken and then this nature will try to give us more dolls and we will say No I have had enough I will go to God

### No Individuality apart from God

If we are inseparable from God and always one have we no individuality? Oh yes that is God Our individuality is God This is not real individuality which you have now You are coming towards that true one Individuality means what cannot be divided How can you call this state—we are now—individuality? One hour

you are thinking one way and the next hour another way and two hours after another way Individuality is that which changes not It would be tremendously dangerous for the present state to remain in eternity then the thief would always remain a thief and the black guard a blackguard If a baby died it would have to remain a baby The real individuality is that which never changes and will never change and that is God within us

# MAN THE MAKER OF HIS DESTINY

There was a very powerful dynasty in Southern India They made it a rule to take the horoscope of all the prominent men living from time to time calculated from the time of their birth In this way they got a record of leading facts predicted and compared them afterwards with events as they happened This was done for a thousand years until they found certain agreements these were generalised and recorded and made into a huge book The dynasty died out but the family of astrologers lived and had the book in their possession It seems possible that this is how astrology came into existence Excessive attention to the minutiae of astro logy is one of the superstitions which has hurt the Hindus very much

I think the Greeks first took Astrology to India and took from the Hindus the science of Astronomy and carried it back with them to Europe Because in India you will find old altars made according to a certain geometrical plan and certain things had to be done when the stars were in certain positions Therefore I think the Greeks gave the Hindus Astrology and the Hindus gave them Astronomy

I have seen some astrologers who predicted wonder ful things but I have no reason to believe they predicted them only from the stars or anything of the sort In many cases it is simply mind reading Sometimes wonderful predictions are made but in many cases it is arrant trash

In London a young man used to come to me and ask me What will become of me next year? I asked him why he asked me so I have lost all my money and have become very very poor Money is the only

God of many beings Weak men when they lose everything and feel themselves weak try all sorts of uncanny methods of making money and come to astro logy and all these things It is the coward and the fool who says This is fate —so says the Sanskrit proverb But it is the strong man who stands up and says I will make my fate It is people who are getting old who talk of fate Young men generally do not come to astrology We *may* be under planetary influence but it should not matter much to us Buddha says Those that get a living by calculation of the stars by such art and other lying tricks are to be avoided and he ought to know because he was the greatest Hindu ever born Let stars come what harm is there? If a star disturbs my life it would not be worth a cent You will find that astrology and all these mystical things are generally signs of a weak mind therefore as soon as they are becoming prominent in our minds we should see a physician take good food and rest

If you can get an explanation of a phenomenon from within its nature it is nonsense to look for an explanation from outside If the world explains itself it is nonsense to go outside for an explanation Have you found any phenomena in the life of a man that you have ever seen which cannot be explained by the power of the man himself? So what is the use of going to the stars or anything else in the world? My own Karma is sufficient explanation of my present state So in the case of Jesus himself We know that his father was only a carpenter We need not go to anybody else to find an explanation of his power He was the outcome of his own past all of which was a preparation for that Jesus Buddha goes back and back to animal bodies and tells how he ulti mately became Buddha So what is the use of going to stars for explanation? They may have a little influence but it is our duty to ignore them rather than hearken to

them and make ourselves nervous This I lay down as the first essential in all I teach anything that brings spiritual mental or physical weakness touch it not with the toes of your feet Religion is the manifestation of the natural strength that is in man A spring of infinite power is coiled up and is inside this little body and that spring is spreading itself And as it goes on spreading body after body is found insufficient it throws them off and takes higher bodies This is the history of man of religion civilisation or progress That giant Prometheus who is bound is getting himself unbound It is always a manifestation of strength and all these ideas such as astrology although there may be a grain of truth in them should be avoided

There is an old story of an astrologer who came to a king and said You are going to die in six months The king was frightened out of his wits and was almost about to die then and there from fear But his minister was a clever man and this man told the king that these astrologers were fools The king would not believe him So the minister saw no other way to make the king see that they were fools but to invite the astrologer to the palace again There he asked him if his calculations were correct The astrologer said that there could not be a mistake but to satisfy him he went through the whole of the calculations again and then said that they were perfectly correct The king s face became livid The minister said to the astrologer And when do you think you will die? In twelve years was the reply The minister quickly drew his sword and separated the astrologer s head from the body and said to the king Do you see this liar? He is dead this moment

If you want your nation to live keep away from all these things The only test of good things is that they make us strong Good is life evil is death These superstitious ideas are springing like mushrooms in your

country and women wanting in logical analysis of things are ready to believe them It is because women are striving for liberation and women have not yet establish ed themselves intellectually One gets by heart a few lines of poetry from the top of a novel and says she knows the whole of Browning Another attends a course of three lectures and then thinks she knows everything in the world The difficulty is that they are unable to throw off the natural superstition of women They have a lot of money and some intellectual learning but when they have passed through this transition stage and get on firm ground they will be all right But they are played upon by charlatans Do not be sorry I do not mean to hurt any one but I have to tell the truth Don t you see how open you are to these things? Don t you see how sincere these women are how that divinity latent in all never dies? It is only to know how to appeal to the Divine

The more I live the more I become convinced every day that every human being is divine In no man or woman however vile does that divinity die Only he or she does not know how to reach it and is waiting for the Truth And wicked people are trying to deceive him or her with all sorts of fooleries If one man cheats another for money you say he is a fool and a blackguard How much greater is the iniquity of one who wants to fool others spiritually! This is too bad It is the one test that truth must make you strong and put you above superstition The duty of the philosopher is to raise you above superstition Even this world this body and mind are superstitions what infinite souls you are! And to be tricked by twinkling stars! It is a shameful condition You are divinities the twinkling stars owe their existence to you

I was once travelling in the Himalayas and the long road stretched before us We poor monks cannot get any one to carry us so we had to make all the way on

foot There was an old man with us The way goes up and down for hundreds of mile and when that old monk saw what was before him he said Oh sir how to cross it I cannot walk any more my chest will break I said to him Look down at your feet He did so and I said The road that is under your feet is the road that you have passed over and is the same road that you see before you it will soon be under your feet The highest things are under your feet because you are Divine Stars all these things are under your feet You can swallow the stars by the handful if you want such is your real nature Be strong get beyond all superstitions and be free

# GOD PERSONAL AND IMPERSONAL

My idea is that what you call a Personal God is the same as the Impersonal Being a Personal and Impersonal God at the same time We are personalised impersonal beings If you use the word in the absolute sense we are impersonal but if you use it in a relative meaning we are personal Each one of you is a universal being each one is omnipresent It may seem staggering at first but I am as sure of this as that I stand before you How can the spirit help being omnipresent? It has neither length nor breadth nor thickness nor any material attribute whatsoever and if we are all spirits we cannot be limited by space Space only limits space matter matter If we were limited to this body we would be a material something Body and soul and everything would be material and such words as living in the body embodying the soul would be only words used for convenience beyond that they would have no meaning Many of you remember the definition I gave of the soul that each soul is a circle whose centre is in one point and circumference nowhere The centre is where the body is and the activity is manifested there You are omnipresent only you have the consciousness of being concentrated in one point That point has taken up particles of matter and formed them into a machine to express itself That through which it expresses itself is called the body So you are everywhere when one body or machine fails you the centre move on and take up other particles of matter finer or grosser and work through that This is man And what is God? God is a circle with its circumference nowhere and centre everywhere Every point in that circle is living conscious active and equally working with us limited souls

only one point is conscious and that point moves forward and backward As the body has a very infinitesimal existence in comparison with that of the universe so the whole universe in comparison with God is nothing When we talk of God speaking we say He speaks through His universe and when we speak of Him beyond all limitations of time and space we say He is an Impersonal Being Yet He is the same Being

To give an illustration We stand here and see the sun Suppose you want to go towards the sun After you get a few thousand miles nearer you will see another sun much bigger Supposing you proceed much closer you will see a much bigger sun At last you will see the real sun millions and millions of miles big Suppose you divide this journey into so many stages and take photographs from each stage and after you have taken the real sun come back and compare them they will all appear to be different because the first view was a little red ball and the real sun was millions of miles bigger yet it was the same sun It is the same with God the Infinite Being we see from different standpoints from different planes of mind The lowest man sees Him as an ancestor as his vision gets higher as the Governor of a planet still higher as the Governor of the universe and the highest man sees Him as himself It was the same God and the different realisations were only degrees and differences of vision

# THE DIVINE INCARNATION OR AVATARA

Jesus Christ was God—the Personal God become man He has manifested himself many times in different forms and these alone are what you can worship God in His absolute nature is not to be worshipped Worshipping such God would be nonsense We have to worship Jesus Christ the human manifestation as God You cannot worship anything higher than the manifestation of God The sooner you give up the worship of God separate from Christ the better for you Think of the Jehovah you manufacture and of the beautiful Christ Any time you attempt to make a God beyond Christ you murder the whole thing God alone can worship God It is not given to man and any attempt to worship Him beyond His ordinary manifestations will be dangerous to mankind Keep close to Christ if you want salvation He is higher than any God that you can imagine If you think that Christ was a man do not worship Him but as soon as you can realise that He is God worship Him Those who say He was a man and then worship Him commit blasphemy there is no half way house for you you must take the whole strength of it He that hath seen the Son hath seen the Father and without seeing the Son you *cannot* see the Father It would be only tall talk and frothy philosophy and dreams and speculations But if you want to have a hold on spiritual life cling close to God as manifest in Christ

Philosophically speaking there was no such human being living as Christ or Buddha we saw God through them In the Koran Mohammed again and again repeats that Christ was never crucified it was a semblance no one could crucify Christ

The lowest state of philosophical religion is dualism the highest form is the Triune state Nature and the human soul are interpenetrated by God and this we see as the Trinity of God nature and soul At the same time you catch a glimpse that all these three are products of the One Just as this body is the covering of the soul so this soul is as it were the body of God As I am the soul of nature so is God the soul of my soul You are the centre through which you see all nature in which you are This nature soul and God make one individual being the universe Therefore they are a unity yet at the same time they are separate Then there is another sort of Trinity which is much like the Christian Trinity God is absolute We cannot see God in His absolute nature we can only speak of that as not this not this Yet we can get certain qualities as the nearest approach to God First is existence second is knowledge third is bliss—very much corresponding to your Father Son and Holy Ghost Father is the existence out of which every thing comes Son is that knowledge It is in Christ that God will be manifest God was everywhere in all beings before Christ but in Christ we became conscious of Him This is God The third is bli s the Holy Spirit As soon as you get this knowledge you get bliss As soon as you begin to have Christ within you you have bliss and that unifies the three

# PRANAYAMA

First of all we will try to understand a little of the meaning of Prânâyâma Prâna stands in metaphysics for the sum total of the energy that is in the universe This universe according to the theory of the philosophers proceeds in the form of waves it rises and again it subsides melts away as it were then again it proceeds out in all this variety then again it slowly returns So it goes on like a pulsation The whole of this universe is composed of matter and force and according to Sanskrit philosophers everything that we call matter solid and liquid is the outcome of one primal matter which they call Âkâsha or ether and the primordial force of which all the forces that we see in nature are manifestations they call Prana It is this Prana acting upon Akasha which creates this universe and after the end of a period called a cycle there is a period of rest One period of activity is followed by a period of rest this is the nature of everything When this period of rest comes all these forms that we see in the earth the sun the moon and the stars all these manifestations melt down until they become ether again They become dissipated as ether All these forces either in the body or in the mind as gravitation attraction motion thought become dissipated and go off into the primal Prana We can understand from this the importance of this Pranayama Just as this ether encompasses us everywhere and we are interpenetrated by it so everything we see is composed of this ether and we are floating in the ether like pieces of ice floating in a lake They are formed of the water of the lake and float in it at the same time So everything that exists is composed of this Akasha and is floating in this ocean *In the same way we are surrounded*

by this vast ocean of Prana—force and energy It is this Prana by which we breathe and by which the circulation of the blood goes on it is the energy in the nerves and in the muscles and the thought in the brain All forces are different manifestations of this same Prana as all matter is a different manifestation of the same Akasha We always find the causes of the gross in the subtle The chemist takes a solid lump of ore and analyses it he wants to find the subtler things out of which that gross is composed So with our thought and our knowledge the explanation of the grosser is in the finer The effect is the gross and the cause the subtle This gross universe of ours which we see feel and touch has its cause and explanation behind in the thought The cause and explanation of that is also further behind So in this human body of ours we first find the gross movements the movements of the hands and lips but where are the causes of these? The finer nerves the movements of which we cannot perceive at all so fine that we cannot see or touch or trace them in any way with our senses and yet we know they are the cause of these grosser movements These nerve movements again are caused by still finer movements which we call thought and that is caused by something finer still behind which is the soul of man the Self the Atman In order to understand ourselves we have first to make our perception fine No microscope or instrument that was ever invented will make it possible for us to see the fine movements that are going on inside we can never see them by any such means So the Yogi has a science that manufactures an instrument for the study of his own mind and that instrument is in the mind The mind attains to powers of finer perception which no instrument will ever be able to attain

*To attain to this power of superfine perception we* have to begin from the gross And as the power becomes

finer and finer we go deeper and deeper inside our own nature and all the gross movements will first be tangible to us and then the finer movements of the thought we will be able to trace the thought before its beginning trace it where it goes and where it ends For instance in the ordinary mind a thought arises The mind does not know how it began or whence it comes The mind is like the ocean in which a wave rises but although the man sees the wave he does not know how the wave came there whence its birth or whither it melts down again he cannot trace it any further But when the perception becomes finer we can trace this wave long long before it comes to the surface and we will be able to trace it for a long distance after it has disappeared and then we can understand psychology as it truly is Nowadays men think this or that and write many volumes which are entirely misleading because they have not the power to analyse their own minds and are talking of things they have never *known* but only theorised about All science must be based on facts and these facts must be observed and generalised Until you have some facts to generalise upon what are you going to do? So all these attempts at generalising are based upon knowing the things we generalise A man proposes a theory and adds theory to theory until the whole book is a patchwork of theories not one of them with the least meaning The science of Raja Yoga says first you must gather facts about your own mind and that can be done by analysing your mind developing its finer powers of perception and seeing for yourselves what is happening inside and when you have got these facts then generalise and then alone you will have the real science of psychology As I have said to come to any finer perception we must take the help of the grosser end of it The current of action which is manifested on the outside is the grosser If we can get hold of this and

go on further and further it becomes finer and finer and at last the finest So this body and everything we have in this body are not different existences but as it were various links in the same chain proceeding from fine to gross You are a complete whole this body is the outside manifestation the crust of the inside the external is grosser and the inside finer and so finer and finer until you come to the Self And at last when we come to the Self we come to know that it was only the Self that was manifesting all this that it was the Self which became the mind and became the body that nothing else exists but the Self and all these others are manifestations of that Self in various degrees becoming grosser and grosser So we will find by analogy that in this whole universe there is the gross manifestation and behind that is the finer movement which we can call the will of God Behind that even we will find that Universal Self And then we will come to know that that Universal Self becomes God and becomes this universe and that it is not that this universe is one and God another and the Supreme Self another but that they are different states of the manifestation of the same Unity behind All this comes of our Pranayama These finer movements that are going on inside the body are connected with the breathing and if we can get hold of this breathing and manipulate it and control it we will slowly get to finer and finer motions and thus enter as it were by getting hold of that breathing into the realms of the mind The first breathing that I taught you in our last lesson was simply an exercise for the time being Some of these breathing exercises again are very difficult and I will try to avoid all the difficult ones because the more difficult ones require a great deal of dieting and other restrictions which it is impossible for most of you to keep to So we will take the slower paths and the simpler ones This breathing consists of three parts The first is breathing

in which is called in Sanskrit Puraka filling and the second part is called Kumbhaka retaining filling the lungs and stopping the air from coming out the third is called Rechaka breathing out The first exercise which I will give you today is simply breathing in and stopping the breath and throwing it out slowly Then there is one step more in the breathing which I will not give you today because you cannot remember them all it would be too intricate These three parts of breathing make one Pranayama This breathing should be regulated because if it is not there is danger in the way to your selves So it is regulated by numbers and I will give you first the lowest numbers Breathe in four seconds then hold the breath for eight seconds then again throw it out slowly in four seconds [1] Then begin again and do this four times in the morning and four times in the evening There is one thing more Instead of counting by one two three and all such meaningless things it is better to repeat any word that is holy to you In our country we have symbolical words Om for instance which means God If that be pronounced instead of one two three four it will serve your purpose very well One thing more This breathing should begin through the left nostril and should turn out through the right nostril and the next time it should be drawn in through the right and thrown out through the left Then reverse again and so on In the first place you should be able to drive your breathing through either nostril at will just by the power of the will After a time you will find it easy but now I am afraid you have not that power So we must stop the one nostril while breathing through the other with the finger and during the retention of course both nostrils

The first two lessons should not be forgotten The

[1] This process is more difficult when the ratio is two eight and four for further remarks see later

first thing is to hold yourselves straight second to think of the body as sound and perfect as healthy and strong Then throw a current of love all around think of the whole universe being happy Then if you believe in God pray Then breathe

In many of you certain physical changes will come twitchings all over the body nervousness some of you will feel like weeping sometimes a violent motion will come Do not be afraid these things have to come as you go on practising The whole body will have to be rearranged as it were New channels for thought will be made in the brain nerves which have not acted in your whole life will begin to work and a whole new series of changes will come in the body itself

# WOMEN OF THE EAST[1]

*(Report of a lecture in the Chicago Daily Inter Ocean September 23 1893)*

Swami Vivekananda at a special meeting discussed the present and future of the women of the East He said The best thermometer to the progress of a nation is its treatment of its women In ancient Greece there was absolutely no difference in the state of man and woman The idea of perfect equality existed No Hindu can be a priest until he is married the idea being that a single man is only half a man an imperfect The idea of perfect womanhood is perfect independence The central idea of the life of a modern Hindu lady is her chastity The wife is the centre of a circle the fixity of which depends upon her chastity It was the extreme of this idea which caused Hindu widows to be burned The Hindu women are very spiritual and very religious perhaps more so than any other women in the world If we can preserve these beautiful characteristics and at the same time develop the intellects of our women the Hindu woman of the future will be the ideal woman of the world

[1] In the collected report of the proceedings of the Worlds Parliament of Religions Vol I Page 156 there is a reference to a lecture by Swami Vivekananda on The Condition of Women of the East The lecture was arranged by Mrs Potter Palmer President of the Board of Lady Managers of the Worlds Parliament at the Womens Building in Jackson Street Chicago

It may interest the reader to know that the published addresses of Swami Vivekananda at the Parliament of Religions in Chicago are not exhaustive and many addresses specially those delivered at the Scientific Section of the Parliament were not all reported The Scientific Sessions were conducted simultaneously with the open session at the Hall of Columbus Swami Vivekananda spoke on the following subjects at the Scientific Section

1 Orthodox Hinduism and the Vedanta Philosophy

*—Friday September 22 1893 at 10 30 a m*

# CONGRESS OF RELIGIOUS UNITY

*(Report of a lecture in the Chicago Sunday Herald September 24 1893)*

Swami Vivekananda said All the words spoken at this parliament come to the common conclusion that the brotherhood of man is the much to be desired end Much has been said for this brotherhood as being a natural condition since we are all children of one God Now there are sects that do not admit of the existence of God—that is a Personal God Unless we wish to leave those sects out in the cold—and in that case our brotherhood will not be universal—we must have our platform broad enough to embrace all mankind It has been said here that we should do good to our fellow men because every bad or mean deed reacts on the doer This appears to me to savour of the shopkeeper—ourselves first our brothers afterwards I think we should love our brother whether we believe in the universal fatherhood of God or not because every religion and every creed recognises man as divine and you should do him no harm that you might not injure that which is divine in him

2 The Modern Religions of India
*—Friday September 22 1893 afternoon session*
3 On the subject of the foregoing address
*—Saturday September 23 1893*
4 The Essence of the Hindu Religion
*—Monday September 25 1893*

*The Chicago Daily Inter Ocean* of September 23 1893 published the following note on the first lecture

In the Scientific Section yesterday morning Swami Vivekananda spoke on Orthodox Hinduism Hall III was crowded to overflowing and hundreds of questions were asked by auditors and answered by the great Sannyasin with wonderful skill and lucidity At the close of the session he was thronged with eager questioners who begged him to give a semi public lecture somewhere on the subject of his religion He said that he already had the project under consideration

# THE LOVE OF GOD I

*(Report of a lecture in the Chicago Herald September 25 1893)*

An audience that filled the auditorium of the Third Unitarian Church at Laflin and Monroe streets heard Swami Vivekananda preach yesterday morning The subject of his sermon was the love of God and his treatment of the theme was eloquent and unique He said that God was worshipped in all parts of the world but by different names and in different ways It is natural for men he said to worship the grand and the beautiful and that religion was a portion of their nature The need of God was felt by all and His love prompted them to deeds of charity mercy and justice All men loved God because He was love itself The speaker had heard since coming to Chicago a great deal about the brotherhood of man He believed that a still stronger tie connected them in that all are the offsprings of the love of God The brotherhood of man was the logical sequence of God as the Father of all The speaker said he had travelled in the forests of India and slept in caves and from his observation of nature he had drawn the belief that there is something above the natural law that keeps men from wrong and that he concluded was the love of God If God had spoken to Christ Mohammed and the Rishis of the Vedas why did He not speak also to him one of his children?

Indeed he does speak to me the Swami continued and to all His children We see Him all around us and are impressed continually by the boundlessness of His love and from that love we draw the inspiration for our well being and well doing

# THE LOVE OF GOD II

*(A lecture delivered in the Unitarian Church of Detroit on February 20 1894 and reported in the Detroit Free Press )*

Vivekananda delivered a lecture on The Love of God at the Unitarian Church last night before the largest audience that he has yet had The trend of the lecturer s remarks was to show that we do not accept God because we really want Him but because we have need of Him for selfish purposes Love said the speaker is something absolutely unselfish that which has no thought beyond the glorification and adoration of the object upon which our affections are bestowed It is a quality which bows down and worships and asks nothing in return Merely to love is the sole request that true love has to ask

It is said of a Hindu saint that when she was married she said to her husband the king that she was already married To whom? asked the king To God was the reply She went among the poor and the needy and taught the doctrine of extreme love for God One of her prayers is significant showing the manner in which her heart was moved I ask not for wealth I ask not for position I ask not for salvation place me in a hundred hells if it be Thy wish but let me continue to regard Thee as my Love The early language abounds in beautiful prayers of this woman When her end came she entered into Samadhi on the banks of a river She composed a beautiful song in which she stated that she was going to meet her Beloved

Men are capable of philosophical analysis of religion A woman is devotional by nature and loves God from the heart and soul and not from the mind The songs

of Solomon are one of the most beautiful parts of the Bible The language in them is much of that affectionate kind which is found in the pravers of the Hindu woman saint And yet I have heard that Christians are going to have these incomparable songs removed I have heard an explanation of the songs in which it is said that Solomon loved a young girl and desired her to return his royal affection The girl however loved a young man and did not want to have anything to do with Solomon This explanation is excellent to some people because they cannot understand such wondrous love for God as is embodied in the songs Love for God in India is different from love for God elsewhere because when you get into a country where the thermometer reads 40 degrees below zero the temperament of the people changes The aspirations of the people in the climate where the books of the Bible are said to have been written were different from the aspirations of the cold blooded Western nations who are more apt to worship the almighty dollar with the warmth expressed in the songs than to worship God Love for God seems to be based upon a basis of what can I get out of it? In their prayers they ask for all kinds of selfish things

Christians are always wanting God to give them something They appear as beggars before the throne of the Almighty A story is told of a beggar who applied to an emperor for alms While he was waiting it was time for the emperor to offer up prayers The emperor prayed O God give me more wealth give me more power give me a greater empire The beggar started to leave The emperor turned and asked him Why are you going? *I do not beg of beggars was the* reply

Some people find it difficult to understand the frenzy of religious fervour which moved the heart of Mohammed He would grovel in the dust and writhe in agony Holy

men who have experienced these extreme emotions have been called epileptic The absence of the thought of self is the essential characteristic of the love for God Religion nowadays has become a mere hobby and fashion People go to church like a flock of sheep They do not embrace God because they need Him Most persons are unconscious atheists who self complacently think that they are devout believers

# INDIA

*(Report of a lecture delivered at Detroit on Thursday February 15 1894 with the editorial comments of the Detroit Free Press )*

An audience that filled the Unitarian Church heard the renowned monk Swami Vivekananda deliver a lecture last night on the manners and customs of his country His eloquent and graceful manner pleased his listeners who followed him from beginning to end with the closest attention showing approval from time to time by outbursts of applause While his lecture was more popular in character than the celebrated Address before the religious congress in Chicago it was highly entertaining especially where the speaker diverted from the instructive portions and was led to an eloquent narration of certain spiritual conditions of his own people It is upon matters religious and philosophic (and necessarily spiritual) that the Eastern brother is most impressive and while outlining the duties that follow the conscientious consideration of the great moral law of nature his softly modulated tones a peculiarity of his people and his thrilling manner are almost prophetic He speaks with marked deliberation except when placing before his listeners some moral truth and then his eloquence is of the highest kind

It seemed somewhat singular that the Eastern monk who is so outspoken in his disapproval of missionary labour on the part of the Christian church in India (where he affirms the morality is the highest in the world) should have been introduced by Bishop Ninde who in June will depart for China in the interest of foreign Christian missions The Bishop expects to remain away until

December but if he should stay longer he will go to India The Bishop referred to the wonders of India and the intelligence of the educated classes there introducing Vivekananda in a happy manner When that dusky gentleman arose dressed in his turban and bright gown with handsome face and bright intelligent eyes he presented an impressive figure He returned thanks to the Bishop for his words and proceeded to explain race divisions in his own country the manners of the people and the different languages Principally there are four northern tongues and four southern but there is one common religion Four fifths of the population of 300 million people are Hindus and the Hindu is a peculiar person He does everything in a religious manner He eats religiously he sleeps religiously he rises in the morning religiously he does good things religiously and he also does bad things religiously At this point the lecturer struck the great moral keynote of his discourse stating that with his people it was the belief that all non self is good and all self is bad This point was emphasised throughout the evening and might be termed the text of the address To build a home is selfish argues the Hindu so he builds it for the worship of God and for the entertainment of guests To cook food is selfish so he cooks it for the poor he will serve himself last if any hungry stranger applies and this feeling extends through out the length and breadth of the land Any man can ask for food and shelter and any house will be opened to him

The caste system has nothing to do with religion A man s occupation is hereditary a carpenter is born a carpenter a goldsmith a goldsmith a workman a work man and a priest a priest But this is a comparatively modern social evil since it has existed only about 1 000 years This period of time does not seem so great in India as in this and other countries Two gifts are especially

appreciated—the gift of learning and the gift of life But the gift of learning takes precedence One may save a man s life and that is excellent one may impart to another knowledge and that is better To instruct for money is an evil and to do this would bring opprobrium on the head of the man who barters learning for gold as though it were an article of trade The Government makes gifts from time to time to the instructors and the moral effect is better than it would be if the conditions were the same as exist in certain alleged civilised countries The speaker had asked through the length and breadth of the land what was the definition of civilisation and he had asked the question in many countries Sometimes the reply had been given What we are that is civilisation He begged to differ in the definition of the word A nation may control the elements develop the utilitarian problems of life eemingly to the limit and yet not realise that in the individual the highest type of civilisation is found in him who has learned to conquer self This condition is found in India more than in any country on earth for there the material conditions are subservient to the spiritual and the individual looks for the soul mani festations in everything that has life studying nature to this end Hence that gentle disposition to endure with indomitable patience the flings of what appears unkind fortune the while there is a full consciousness of a spiritual strength and knowledge greater than those possessed by any other people hence the existence of a country and a people from which flows an unending stream that attracts the attention of thinkers far and near to approach and throw from their shoulders an oppressive earthly burden The early king who in 260 B C commanded that there should be no more bloodshed no more wars and who sent forth instead of soldiers an army of ins tructors acted wisely although in material things the land has suffered But though in bondage to brutal nations

who conquer by force the Indian s spirituality endures for ever and nothing can take it away from him There is something Christlike in the humility of the people to endure the stings and arrows of outraged fortune the while the soul is advancing towards the brighter goal Such a country has no need of Christian missionaries to preach ideas for theirs is a religion that makes men gentle sweet considerate and affectionate towards all God s creatures whether man or beast Morally said the speaker India is head and shoulders above the United States or any other country on the globe Missionaries would do well to come there and drink of the pure waters and see what a beautiful influence upon a great community have the lives of the multitude of holy men

Then marriage condition was described and the privileges extended to women in ancient times when the system of co education flourished In the records of the saints in India there is the unique figure of the prophetess In the Christian creed they are all prophets while in India the holy women occupy a conspicuous place in the holy books The householder has five objects for worship One of them is learning and teaching Another is worship of dumb creatures It is hard for Americans to understand the last worship and it is difficult for Europeans to appreciate the sentiment Other nations kill animals by wholesale and kill one another they exist in a sea of blood A European said that the reason why in India animals were not killed was because it was supposed that they *contained the spirits of ancestors This reason was* worthy of a savage nation who are not many steps from the brute The fact was the statement was made by a set of atheists in India who thus carped at the Vedic idea of non killing and transmigration of souls It was never a religious doctrine it was an idea of a materialistic creed The worship of dumb animals was pictured in a vivid manner The hospitable spirit—the Indian golden

rule was illustrated by a story A Brâhmin his wife his son and his son s wife had not tasted food for some time on account of a famine The head of the house went out and after a search found a small quantity of barley He brought this home and divided it into four portions and the small family was about to eat when a knock was heard at the door It was a guest The different portions were set before him and he departed with his hunger satisfied while the quartette who had entertained him perished This story is told in India to illustrate what is expected in the sacred name of hospitality

The speaker concluded in an eloquent manner Throughout his speech was simple but whenever he indulged in imagery it was delightfully poetic showing that the Eastern brother has been a close and attentive observer of the beauties of nature His excessive spiritu ality is a quality which makes itself felt with his auditors for it manifests itself in the love for animate and inanimate things and in the keen insight into the mysterious workings of the divine law of harmony and kindly intentions

# HINDUS AND CHRISTIANS

*(A lecture delivered at Detroit on February 21 1894 and reported in the Detroit Free Press )*

Of the different philosophies the tendency of the Hindu is not to destroy but to harmonise everything If any new idea comes into India we do not antagonise it but simply try to take it in to harmonise it because this method was taught first by our prophet God incar nate on earth Shri Krishna This Incarnation of God preached himself first I am the God Incarnate I am the inspirer of all books I am the inspirer of all reli gions Thus we do not reject any

There is one thing which is very dissimilar between us and Christians something which we never taught That is the idea of salvation through Jesus blood or cleansing by any man s blood We had our sacrifice as the Jews had Our sacrifices mean simply this Here is some food I am going to eat and until some portion is offered to God it is bad so I offer the food This is the pure and simple idea But with the Jew the idea is that his sin be upon the lamb and let the lamb be sacrificed and him go scot free We never developed this beautiful idea in India and I am glad we did not I for one would not come to be saved by such a doctrine If anybody would come and say Be saved by my blood I would say to him My brother go away I will go to hell I am not a coward to take innocent blood to go to heaven I am ready for hell So that doctrine never cropped up amongst us and our prophet says that whenever evil and immorality prevail on earth He will come down and support His children and this He is doing from time to time and from place to place And wherever on earth

you see an extraordinary holy man trying to uplift humanity know that He is in him

So you see that is the reason why we never fight any religion We do not say that ours is the only way to salvation Perfection can be had by everybody and what is the proof? Because we see the holiest of men in all countries good men and women everywhere whether born in our faith or not Therefore it cannot be held that ours is the only way to salvation Like so many *rivers flowing from different mountains all coming and* mingling their waters in the sea all the different religions taking their births from different standpoints of fact come unto Thee This is a part of the child s everyday prayer in India With such everyday prayers of course such ideas as fighting because of differences of religion are simply impossible So much for the philosophers of India We have great regard for all these men especially this prophet Shri Krishna on account of his wonderful catholicity in harmonising all the preceding revelations

Then the man who is bowing down before the idol It is not in the same sense as you have heard of the Babylonian and the Roman idolatry It is peculiar to the Hindus The man is before the idol and he shuts his eyes and tries to think I am He I have neither life nor death I have neither father nor mother I am not bound by time or space I am Existence infinite Bliss infinite and Knowledge infinite I am He I am He I am not bound by books or holy places or pilgrimages or anything whatsoever I am Existence Absolute Bliss Absolute I am He I am He This he repeats and then says O Lord I cannot conceive Thee in myself I am a poor man Religion does not depend upon know ledge It is the soul itself it is God not to be attained by simple book knowledge or powers of speech You may take the most learned man you have and ask him to think of spirit as spirit he cannot You may imagine

spirit he may imagine spirit It is impossible to think of spirit without training So no matter how much theology you may learn—you may be a great philosopher and greater theologian—but the Hindu boy would say Well that has nothing to do with religion Can you think of spirit as spirit? Then alone all doubt ceases and all crookedness of the heart is made straight Then only all fears vanish and all doubtings are for ever silent when man s soul and God come face to face

A man may be wonderfully learned in the Western sense yet he may not know the A B C of religion I would tell him that I would ask him Can you think of spirit as such? Are you advanced in the science of the soul? Have you manifested your own soul above matter? If he has not then I say to him Religion has not come to you it is all talk and book and vanity But this poor Hindu sits before that idol and tries to think that he is That and then says O Lord I cannot conceive Thee as spirit so let me conceive Thee in this form and then he opens his eyes and sees this form and prostrating he repeats his prayers And when his prayer is ended he says O Lord forgive me for this imperfect worship of Thee

You are always being told that the Hindu worships blocks of stone Now what do you think of this fervent nature of the souls of these people? I am the first monk to come over to these Western countries—it is the first time in the history of the world that a Hindu monk has crossed the ocean But we hear of such criticisms and hear of these talks and what is the general attitude of my nation towards you? They smile and say They are children they may be great in physical science they may build huge things but in religion they are simply children That is the attitude of my people

One thing I would tell you and I do not mean any unkind criticism You train and educate and clothe and

pay men to do what? To come over to my country to curse and abuse all my forefathers my religion and everything They walk near a temple and say You idolators you will go to hell But they dare not do that to the Mohammedans of India the sword would be out But the Hindu is too mild he smiles and passes on and says Let the fools talk That is the attitude And then you who train men to abuse and criticise if I just touch you with the least bit of criticism with the kindest of purpose you shrink and cry Don t touch us we are Americans We criticise all the people in the world curse them and abuse them say anything but do not touch us we are sensitive plants You may do whatever you plea e but at the same time I am going to tell you that we are content to live as we are and in one thing we are better off—we never teach our children to swallow such horrible stuff where every prospect pleases and man alone is vile And whenever your ministers criticise us let them remember this If all India stands up and takes all the mud that is at the bottom of the Indian Ocean and throws it up against the Western countries it will not be doing an infinitesimal part of that which you are doing to us And what for? Did we ever send one missionary to convert anybody in the world? We say to you Welcome to your religion but allow me to have mine You call yours an aggressive religion You are aggressive but how many have you taken? Every sixth man in the world is a Chinese subject a Buddhist then there are Japan Tibet and Russia and Siberia and Burma and Siam and it may not be palatable but this Christian morality the Catholic Church is all derived from them Well and how was this done? Without the shedding of one drop of blood! With all your brags and boastings where has your Christianity succeeded without the sword? Show me one place in the whole world One I say throughout the history of the

Christian religion—one I do not want two I know how your forefathers were converted They had to be converted or killed that was all What can you do better than Mohammedanism with all your bragging? We are the only one! And why? Because we can kill others The Arabs said that they bragged And where is the Arab now? He is the Bedouin The Romans used to say that and where are they now? Blessed are the peace makers they shall enjoy the earth *Such things tumble down it is built upon sands it* cannot remain long

Everything that has selfishness for its basis competition as its right hand and enjoyment as its goal must die sooner or later Such things must die Let me tell you brethren if you want to live if you really want your nation to live go back to Christ You are not Christians No as a nation you are not Go back to Christ Go back to him who had nowhere to lay his head The birds have their nests and the beasts their lairs but the Son of Man has nowhere to lay his head Yours is religion preached in the name of luxury What an irony of fate! Reverse this if you want to live reverse this It is all hypocrisy that I have heard in this country If this nation is going to live let it go back to him You connot serve God and Mammon at the same time All this prosperity all this from Christ! Christ would have denied all such heresies All prosperity which comes with Mammon is transient is only for a moment Real permanence is in Him If you can join these two this wonderful prosperity with the ideal of Christ it is well But if you cannot better go back to him and give this up Better be ready to live in rags with Christ than to live in palaces without him

## CHRISTIANITY IN INDIA

*(A lecture delivered at Detroit on March 11 1894 and reported in the Detroit Free Press )*

Vive Kananda spoke to a crowded audience at the Detroit Opera House last night He was given an extremely cordial reception and delivered his most eloquent address here He spoke for two hours and a half

Hon T W Palmer in introducing the distinguished visitor referred to the old tale of the shield that was copper on one side and silver on the other and the contest which ensued If we look on both sides of a question there would be less dispute It is possible for all men to agree The matter of foreign missions has been dear to the religious heart Vive Kananda from the Christian stand point said Mr Palmer was a pagan It would be pleasant to hear from a gentleman who spoke about the copper side of the shield

Vive Kananda was received with great applause

I do not know much about missionaries in Japan and China but I am well posted about India The people of this country look upon India as a vast waste with many jungles and a few civilised Englishmen India is half as large as the United States and there are three hundred million people Many stories are related and I have become tired of denying these The first invaders of India the Aryans did not try to exterminate the population of India as the Christians did when they went into a new land but the endeavour was made to elevate persons of brutish habits The Spaniards came to Ceylon with Christianity The Spanirads thought that their God commanded them to kill and murder and to tear down heathen temples The Buddhists had a tooth a foot

long which belonged to their Prophet and the Spanirads threw it into the sea killed a few thousand persons and converted a few scores The Protuguese came to Western India The Hindus have a belief in the Trinity and had a temple dedicated to their sacred belief The invaders looked at the temple and said it was a creation of the devil and so they brought their cannon to bear upon the wonderful structure and destroyed a portion of it But the invaders were driven out of the country by the enraged population The early missionaries tried to get hold of the land and in their effort to secure a foot hold by force they killed many people and converted a number Some of them became Christians to save their lives Ninety nine per cent of the Christians converted by the Portuguese sword were compelled to be so and they said We do not believe in Christianity but we are forced to call ourselves Christians But Catholic Christianity soon relapsed

The East India Company got possession of a part of India with the idea of making hay while the sun shone They kept the missionaries away The Hindus were the first to welcome the missionaries not the Englishmen who were engaged in trade I have great admiration for some of the first missionaries of the later period who were true servants of Jesus and did not vilify the people or spread vile falsehoods about them They were gentle kindly men When Englishmen became masters of India the missionary enterprise began to become stagnant a condition which characterises the missionary efforts in India today Dr Long an early missionary stood by the people He translated a Hindu drama describing the evils perpetrated in India by indigo planters and what was the result? He was placed in jail by the English Such missionaries were of benefit to the country but they have passed away The Suez Canal opened up a number of evils

Now goes the missionary a married man who is hampered because he is married The missionary knows nothing about the people he cannot speak the language so he invariably settles in the little white colony He is forced to do this because he is married Were he not married he could go among the people and sleep on the ground if necessary So he goes to India to seek company for his wife and children He stays among the English speaking people The great heart of India is today absolutely untouched by missionary effort Most of the missionaries are incompetent I have not met a single missionary who understands Sanskrit How can a man absolutely ignorant of the people and their traditions get into sympathy with them? I do not mean any offence but Christians send men as missionaries who are not persons of ability It is sad to see money spent to make converts when no real results of a satisfactory nature are reached

Those who are converted are the few who make a sort of living by hanging round the missionaries The converts who are not kept in service in India cease to be converts That is about the entire matter in a nutshell As to the way of converting it is absolutely absurd The money the missionaries bring is accepted The colleges founded by the missionaries are all right so far as the education is concerned But with religion it is different The Hindu is acute he takes the bait but avoids the hook! It is wonderful how tolerant the people are A missionary once said That is the worst of the whole business People who are self complacent can never be converted

As regards the lady missionaries they go into certain houses get four shillings a month teach them something of the Bible and show them how to knit The girls of India will never be converted Atheism and scepticism at home is what is pushing the missionary into other lands

When I came into this country I was surprised to meet so many liberal men and women But after the Parliament of Religions a great Presbyterian paper came out and gave me the benefit of a seething article This the editor called enthusiasm The missionaries do not and cannot throw off nationality—they are not broad enough—and so they accomplish nothing in the way of converting although they may have a nice sociable time among themselves India requires help from Christ but not from the antichrist these men are not Christlike They do not act like Christ they are married and come over and settle down comfortably and make a fair livelihood Christ and his disciples would accomplish much good in India just as many of the Hindu saints do but these men are not of that sacred character The Hindus would welcome the Christ of the Christians gladly because his life was holy and beautiful but they cannot and will not receive the narrow utterances of the ignorant hypocritical or self deceiving men

Men are different If they were not the mentality of the world would be degraded If there were not different religions no religion would survive The Christian requires his religion the Hindu needs his own creed All religions have struggled against one another for years Those which were founded on a book still stand Why could not the Christians convert the Jews? Why could they not make the Persians Christians? Why could they not convert the Mohammedans? Why cannot any impression be made upon China and Japan? Buddhism the first missionary religion numbers double the number of converts of any other religion and they did not use the sword The Mohammedans used the greatest violence They number the least of the three great missionary religions The Mohammedans have had their day Every day you read of Christian nations acquiring land by bloodshed What missionaries preach against this? Why

should the most blood thirsty nations exalt an alleged religion which is not the religion of Christ? The Jews and the Arabs were the fathers of Christianity and how they have been persecuted by the Christians! The Christians have been weighed in the balance in India and have been found wanting I do not mean to be unkind but I want to show the Christians how they look in others eyes The missionaries who preach the burn ing pit are regarded with horror The Mohammedans rolled wave after wave over India waving the sword and today where are they?

The farthest that all religions can see is the existence of a spiritual entity So no religion can teach beyond that point In every religion there is the essential truth and the non essential casket in which this jewel lies Believing in the Jewish book or in the Hindu book is non essential Circumstances change the receptacle is different but the central truth remains The essentials being the same the educated people of every community retain the essentials If you ask a Christian what his essentials are he should reply The teachings of Lord Jesus Much of the rest is nonsense But the non sensical part is right it forms the receptacle The shell of the oyster is not attractive but the pearl is within it The Hindu will never attack the life of Jesus he reverences the Sermon on the Mount But how many Christians know or have heard of the teachings of the Hindu holy men? They remain in a fool s paradise Before a small fraction of the world was converted Christianity was divided into many creeds That is the law of nature Why take a single instrument from the great religious orchestra of the earth? Let the grand symphony go on Be pure Give up superstition and see the wonderful harmony of nature Superstition gets the better of religion All the religions are good since the essentials are the same Each man should have the

perfect exercise of his individuality but these individual ities form a perfect whole This marvellous condition is already in existence Each creed has something to add to the wonderful structure

I pity the Hindu who does not see the beauty in Jesus Christ s character I pity the Christian who does not reverence the Hindu Christ The more a man sees of himself the less he sees of his neighbours Those that go about converting who are very busy saving the souls of others in many instances forget their own souls I was asked by a lady why the women of India were not more elevated It is in a great degree owing to the barbarous invaders through different ages it is partly due to the people of India themselves But our women are any day better than the ladies of this country who are devotees of novels and balls Where is the spirituality one would expect in a country which is so boastful of its civilisation? I have not found it Here and here after are words to frighten children It is all here To live and move in God—even here even in this body! All self should go out all superstition should be banished Such men live in India Where are such in this country? Your preachers speak against dreamers The people of this country would be better off if there were more dreamers If a man here followed literally the instruc tion of his Lord he would be called a fanatic There is a good deal of difference between dreaming and the brag of the nineteenth century The bees look for the flowers Open the lotus! The whole world is full of God and not of sin Let us help each other Let us love each other A beautiful prayer of the Buddhist is I bow down to all the saints I bow down to all the prophets I bow down to all holy men and women all over the world!

# THE RELIGION OF LOVE

*(Notes of a lecture delivered in London on November 16 1895)*

Just as it is necessary for a man to go through symbols and ceremonies first in order to arrive at the depth of realisation so we say in India It is good to be born in a church but bad to die in one A sapling must be hedged about for protection but when it becomes a tree a hedge would be a hindrance So there is no need to criticise and condemn the old forms We forget that in religion there must be *growth*

At first we think of a Personal God and call Him Creator Omnipotent Omniscient and so forth But when love comes God is only love The loving worshipper does not care *what* God is because he wants nothing from Him Says an Indian saint I am no beggar! Neither does he fear God is loved as a human being

Here are some of the systems founded on love (1) Shânta common peaceful love with such thoughts as those of fatherhood and help (2) Dasya the ideal of service God as master or general or sovereign giving punishments and rewards (3) Vâtsalya God as mother or child In India the mother never punishes In each of these stages the worshipper forms an ideal of God and follows it Then He becomes (4) the Friend There is here no fear There is also the feeling of equality and familiarity There are some Hindus who worship God as friend and playmate Next comes (5) Madhura sweetest love the love of husband and wife Of this S Teresa and the ecstatic saints have been examples Amongst the Persians God has been looked upon as the

wife amongst the Hindus as the husband We may recall the great queen Mira Bai who preached that the Divine Spouse was all Some carry this to such an extreme that to call God mighty or father seems to them blasphemy The language of this worship is erotic Some even use that of illicit passion To this cycle belongs the story of Krishna and the Gopi girls All this probably seems to you to entail great degeneration on the worshipper And so it does Yet many great saints have been developed by it And no human institution is beyond abuse Would you cook nothing because there are beggars? Would you possess nothing because there are thieves? Oh Beloved one kiss of Thy lips once tasted hath made me mad!

The fruit of this idea is that one can no longer belong to any sect or endure ceremonial Religion in India culminates in freedom But even this comes to be given up and all is love for love s sake

Last of all comes *love without distinction* the S[illegible] There is a Persian poem that tells how a lover came [illegible] the door of his beloved and knocked She asked [illegible] art thou? and he replied I am so and so thy bel[illegible] and she answered only Go! I know none [illegible] But when she had asked for the fourth time h[illegible] am thyself O my Beloved therefore open thou [illegible] And the door was opened

A great saint said using the language [illegible] describing love Four eyes met There [illegible] in two souls And now I cannot tell whether [illegible] and I a woman or he is a woman and I [illegible] only I remember two souls were Love [illegible] was one

In the highest love union is only [illegible] love of any other kind is quickly eva[illegible] Only [illegible] spiritual lasts and this grows

Love sees the Ideal This is the [illegible]

triangle God has been Cause Creator Father Love is the culmination The mother regrets that her child is humpbacked but when she has nursed him for a few days she loves him and thinks him most beautiful The lover sees the beauty of Helen in the brow of Ethiopia We do not commonly realise what happens The brow of Ethiopia is merely suggestion the man sees Helen His ideal is thrown upon the suggestion and covers it as the oyster makes sand into a pearl God is this ideal through which man may see all

Hence we come to love love itself This love cannot be expressed No words can utter it We are dumb about it

The senses become very much heightened in love Human love we must remember is mixed up with attributes It is dependent too on the other s attitude Indian languages have words to describe this inter dependence of love The lowest love is selfish it consists in the pleasure of being loved We say in India One gives the cheek the other kisses Above this is mutual love But this also ceases mutually True love is all giving We don t even want to see the other or to do anything to express our feeling It is enough to give It is almost impossible to love a human being like this but it is possible to love God

In India there is no idea of blasphemy if boys fighting in the street use the name of God We say Put your hand into the fire and whether you feel it or not you will be burnt So to utter the name of God can bring nothing but good

The notion of blasphemy comes from the Jews who were impressed by the spectacle of Persian loyalty The ideas that God is judge and punisher are not in themselves bad but they are low and vulgar The three angles of the triangle are Love begs not Love knows no fear Love is always of the ideal

Who would be able to live one second
Who would be able to breathe one moment
If the Loving one had not filled the universe?

Most of us will find that we were born for service We must leave the results to God The work was done only for love of God If failure comes there need be no sorrow The work was done only for love of God

In women the mother nature is much developed They worship God as the child They ask nothing and will do anything

The Catholic Church teaches many of these deep things and though it is narrow it is religious in the highest sense In modern society Protestantism is broad but shallow To judge truth by what good it does is as bad as to question the value of a scientific discovery to a baby

Society must be outgrown We must crush law and become outlaws We allow nature only in order to conquer her Renunciation means that none can serve both God and Mammon

Deepen your own power of thought and love Bring your own lotus to blossom the bees will come of themselves Believe first in yourself then in God A handful of strong men will move the world We need a heart to feel a brain to conceive and a strong arm to do the work Buddha gave himself for the animals Make yourself a fit agent to work But it is God who works not you One man contains the whole universe One particle of matter has all the energy of the Universe at its back In a conflict between the heart and the brain follow your heart

Yesterday competition was the law Today cooperation is the law Tomorrow there is no law Let sages praise thee or let the world blame Let fortune itself come or let poverty and rags stare thee in the face

Eat the herbs of the forest one day for food and the next share a banquet of fifty courses Looking neither to right hand nor to the left follow thou on!

The Swami began by telling in answer to questions the story of how Pavhâri Bâbâ snatched up his own vessels and ran after the thief only to fall at his feet and say

O Lord I knew not that Thou wert there! Take them! They are Thine! Pardon me Thy child!

Again he told how the same saint was bitten by a cobra and when towards nightfall he recovered he said A messenger came to me from the Beloved

# JNANA AND KARMA

*(Notes of a lecture delivered in London on November 23 1895)*

The greatest force is derived from the power of thought *The finer the element the more powerful it is The silent power of thought influences people* even at a distance because mind is one as well as many The universe is a cobweb minds are spiders

The universe equals the phenomena of one Universal Being He seen through our senses is the Universe This is Mâyâ So the world is illusion that is the imperfect vision of the Real a semi revelation even as the sun in the morning is a red ball Thus all evils and wickedness are but weakness the *imperfect vision of goodness*

A straight line projected infinitely becomes a circle The search for good comes back to Self I am the whole mystery God I am a body the lower self and I am the Lord of the Universe

Why should a man be moral and pure? Because this strengthens his will Everything that strengthens the will by revealing the real nature is moral Every thing that does the reverse is immoral The standard varies from country to country from individual to indi vidual Man must recover from his state of slavery to laws to words and so on We have no freedom of the will now but we shall have when we are free Renun ciation is this giving up of the world Through the senses anger comes and sorrow comes As long as renunciation is not *there* self and the passion animating it are different At last they become identified and the

man is an animal at once Become possessed with the feeling of renunciation

I once had a body was born struggled and died What awful hallucinations! To think that one was cramped in a body weeping for salvation!

But does renunciation demand that we all become ascetics? Who then is to help the others? Renunciation is not asceticism Are all beggars Christs? Poverty is not a synonym for holiness often the reverse Renunciation is of the mind How does it come? In a desert when I was thirsty I saw a lake It was in the midst of a beautiful landscape There were trees surrounding it and their reflections could be seen in the water upside down But the whole thing proved to be a mirage Then I knew that every day for a month I had seen this and only that day being thirsty I had learnt it to be unreal Every day for a month I should see it again But I should never take it to be real So when we reach God the idea of the universe the body and so on will vanish It will return afterwards But next time we shall know it to be unreal

The history of the world is the history of persons like Buddha and Jesus The passionless and unattached do most for the world Picture Jesus in the slums He sees beyond the misery You my brethren are all divine His work is calm He removes causes You will be able to work for the good of the world when you know for a fact that this work is all illusion The more unconscious this work the better because it is then the more superconscious Our search is not for good or evil but happiness and good are nearer to truth than their opposites A man ran a thorn into his finger and with another thorn took it out The first thorn is Evil The second thorn is Good The Self is that Peace which passeth beyond both evil and good The universe is melting down man draws nearer to God For one

moment he is real—God He is re differentiated—a prophet Before him now the world trembles A fool sleeps and wakes a fool A man unconscious—and superconscious he returns with infinite power purity and love—the God Man This is the use of the super conscious state

Wisdom can be practised even on a battle field The Gita was preached so There are three states of mind the active the passive and the serene The passive state is characterised by slow vibrations the active by quick vibrations and the serene by the most intense vibrations of all Know that the soul is sitting in the chariot The body is the chariot the outer senses are the horses and the mind the reins and the intellect the charioteer So man crosses the ocean of Maya He goes beyond He reaches God When a man is under the control of his senses he is of this world When he has controlled the senses he has renounced

Even forgiveness if weak and passive is not true fight is better *Forgive* when you could bring legions of angels to the victory Krishna the charioteer of Arjuna hears him say Let us forgive our enemies and answers You speak the words of wise men but you are not a wise man but a coward As a lotus leaf living in the water yet untouched by it so should the soul be in the world This is a battle field fight your way out Life in this world is an attempt to see God Make your life a manifestation of will strengthened by renunciation

We must learn to control all our brain centres con sciously The first step is the joy of living Asceticism is fiendish To laugh is better than to pray Sing Get rid of misery Don t for heaven s sake infect others with it Never think God sells a little happiness and a little unhappiness Surround yourself with flowers

pictures and incense The saints went to the mountain tops to enjoy nature

The second step is purity

The third is full training of the mind Reason out what is true from what is untrue See that God alone is true If for a moment you think you are not God great terror will seize you As soon as you think *I am He* great peace and joy will come to you Control the senses If a man curses me I should still see in him God whom through my weakness I see as a curser The poor man to whom you do good is extending a privilege to you He allows you through His mercy to worship Him thus

The history of the world is the history of a few men who had faith in themselves That faith calls out the divinity within You can do anything You fail only when you do not strive sufficiently to manifest infinite power As soon as a man or a nation loses faith death comes

There is a divine within that cannot be overcome either by church dogmas or by blackguardism A hand ful of Greeks speak wherever there is civilisation Some mistakes there must always be Do not grieve Have great insight Do *not* think What is done is done Oh that twere done better! If man had not been God humanity would by *this* time have *become* insane with its litanies and its penitence

None will be left none destroyed All will in the end be made perfect Say day and night Come up my brothers! You are the infinite ocean of purity! *Be God! Manifest as God!*

What is civilisation? It is the feeling of the divine within When you find time repeat these ideas to yourself and desire freedom That is all Deny every thing that is not God Assert everything that is God

Mentally assert this day and night So the veil grows thinner

I am neither man nor angel I have no sex nor limit I am knowledge itself I am He I have neither anger nor hatred I have neither pain nor pleasure Death or birth I never had For I am Knowledge Absolute and Bliss Absolute I am He my soul I am He!

Find yourself bodiless You never had a body *It was all superstition* Give back the divine consciousness to all the poor the down trodden the oppressed and the sick

Apparently every five hundred years or so a wave of this thought comes over the world Little waves arise in many directions but one swallows up all the others and sweeps over society That wave does this which has most character at its back

Confucius Moses and Pythagoras Buddha Christ Mohammed Luther, Calvin and the Sikhs Theosophy Spiritualism and the like all these mean only the preaching of the Divine in Man

Never say man is weak Wisdom Yoga is no better than the others Love is the ideal and requires no object Love is God So even through devotion we reach the subjective God I am He! How can one work unless one loves city country animals the universe? Reason leads to the finding of unity in variety Let the atheist and the agnostic work for the social good So God comes

But this you must guard against Do not disturb the faith of any For you must know that religion is not in doctrines Religion lies in being and becoming in realisation All men are born idolators The lowest man is an animal The highest man is perfect And between these two all have to think in sound and colour in doctrine and ritual

The test of having ceased to be an idolator is When you say I does the body come into your thought or not? If it does then you are still a worshipper of idols Religion is not intellectual jargon at all but realisation If you *think* about God you are only a fool The ignorant man by prayer and devotion can reach beyond the philosopher To know God no philosophy is necessary Our duty is not to disturb the faith of others Religion is experience Above all and in all be sincere identification brings misery because it brings desire Thus the poor man sees gold and identifies himself with the need of gold Be the witness *Learn never to react*

# THE CLAIMS OF VEDANTA ON THE MODERN WORLD

*(Report of a lecture delivered in Oakland on Sunday February 25 1900 with editorial comments of The Oakland Enquirer )*

The announcement that Swami Vivekananda a distinguished savant of the East would expound the philosophy of Vedanta in the Parliament of Religions at the Unitarian Church last evening attracted an immense throng The main auditorium and ante rooms were packed the annexed auditorium of Wendte Hall was thrown open and this was also filled to overflowing and it is estimated that fully 500 persons who could not obtain seats or standing room where they could hear con veniently were turned away

The Swami created a marked impression Fre quently he received applause during the lecture and upon concluding held a levee of enthusiastic admirers He said in part under the subject of The Claims of Vedanta on the Modern World

Vedanta demands the consideration of the modern world The largest number of the human race is under its influence Again and again millions upon millions have swept down on its adherents in India crushing them with their great force and yet the religion lives

In all the nations of the world can such a system be found? Others have risen to come under its shadow Born like mushrooms today they are alive and flourish ing and tomorrow they are gone Is this not the survival of the fittest?

It is a system not yet complete It has been grow ing for thousands of years and is still growing So I can give you but an idea of all I would say in one brief hour

First to tell you of the history of the rise of Vedanta When it arose India had already perfected a religion Its crystallisation had been going on many years Already there were elaborate ceremonies already there had been perfected a system of morals for the different stages of life But there came a rebellion against the mummeries and mockeries that enter into many religions in time and great men came forth to proclaim through the Vedas the true religion Hindus received their religion from the revelation of these Vedas They were told that the Vedas were without beginning and without end It may sound ludicrous to this audience—how a book can be without beginning or end but by the Vedas no books are meant They mean *the accumulated treasury of spiritual laws discovered* by different persons in different times

Before these men came the popular ideas of a God ruling the universe and that man was immortal were in existence But there they stopped It was thought that nothing more could be known Here came the daring of the expounders of Vedanta They knew that religion meant for children is not good for thinking men that there is something more of man and God

The moral agnostic knows only the external dead nature From that he would form the law of the universe He might as well cut off my nose and claim to form an idea of my whole body as argue thus

He must look within The stars that sweep through the heavens even the universe is but a drop in the bucket Your agnostic sees not the greatest and he is frightened at the universe

The world of spirit is greater than all The God of universe who rules—our Father our Mother What is this heathen mummery we call the world? There is misery everywhere The child is born with a cry upon its lips it is its first utterance This child becomes

a man and so well used to misery that the pang of the heart is hidden by a smile on the lips

Where is the solution of this world? Those who look outside will never find it they must turn their eyes inward and find truth Religion lives inside

One man preaches if you chop your head off you get salvation But does he get any one to follow him? Your own Jesus says Give all to the poor and follow me How many of you have done this? You have not followed out this command and yet Jesus was the great teacher of your religion Every one of you is practical in his own life and you find this would be impracticable

But Vedanta offers you nothing that is impractic able Every science must have its own matter to work upon Everyone needs certain conditions and much of training and learning but any Jack in the street can tell you all about religion You may want to follow religion and follow an expert but you may only care to converse with Jack for he can talk it

You must do with religion as with science come in direct contact with facts and on that foundation build a marvellous structure

To have a true religion you must have instruments Belief is not in question of faith you can make nothing for you can believe anything

We know that in science as we increase the velocity the mass decreases and as we increase the mass the velocity decreases Thus we have matter and force The matter we do not know how disappears into force and force into matter Therefore there is some thing which is neither force nor matter as these two may not disappear into each other This is what we call mind —the universal mind

Your body and my body are separate you say I am but a little whirlpool in the universal ocean of

mankind A whirlpool it is true but a part of the great ocean

You stand by moving water where every particle is changing and yet you call it a stream The water is changing it is true but the banks remain the same The mind is not changing but the body—how quick its growth! I was a baby a boy a man and soon I will be an old man stooped and aged The body is changing and you say is the mind not changing also? When I was a child I was thinking I have become larger because my mind is a sea of impressions

There is behind nature a universal mind The spirit is simply a unit and it is not matter For man is a spirit The question Where does the soul go after death? should be answered like the boy when he asked Why does not the earth fall down? The questions are alike and their solutions alike for where could the soul go to?

To you who talk of immortality I would ask when you go home to endeavour to imagine you are dead Stand by and touch your dead body You cannot for you cannot get out of yourself The question is not concerning immortality but as to whether Jack will meet his Jenny after death

The one great secret of religion is to know for yourself that you are a spirit Do not cry out I am a worm I am nobody! As the poet says I am Existence Knowledge and Truth No man can do any good in the world by crying out I am one of its evils The more perfect the less imperfections you see

# THE LAWS OF LIFE AND DEATH

*(Report of a lecture delivered in Oakland on March 7 1900 with editorial comments of the Oakland Tribune )*

Swami Vivekananda delivered a lecture last evening on the subject The Laws of Life and Death The Swami said How to get rid of this birth and death—not how to go to heaven but how one can stop going to heaven—this is the object of the search of the Hindu

The Swami went on to say that nothing stands isolated—everything is a part of the never ending pro cession of cause and effect If there are higher beings than man they also must obey the laws Life can only spring from life thought from thought matter from matter A universe cannot be created out of matter It has existed for ever If human beings came into the world fresh from the hands of nature they would come without impressions but we do not come in that way which shows that we are not created afresh If human souls are created out of nothing what is to prevent them from going back into nothing? If we are to live all the time in the future we must have lived all the time in the past

It is the belief of the Hindu that the soul is neither mind nor body What is it which remains stable—which can say I am I ? Not the body for it is always changing and not the mind which changes more rapidly than the body which never has the same thoughts for even a few minutes There must be an identity which does not change—something which is to man what the banks are to the river—the banks which do not change and without whose immobility we would

not be conscious of the constantly moving stream Behind the body behind the mind there must be some thing viz the soul which unifies the man Mind is merely the fine instrument through which the soul—the master—acts on the body In India we say a man has given up his body while you say a man gives up his ghost The Hindus believe that a man is a soul and has a body while Western people believe he is a body and possesses a soul

Death overtakes everything which is complex The soul is a single element not composed of anything else and therefore it cannot die By its very nature the soul must be immortal Body mind and soul turn upon the wheel of law—none can escape No more can we transcend the law than can the stars than can the sun—it is all a universe of law The law of Karma is that every action must be followed sooner or later by an effect The Egyptian seed which was taken from the hand of a mummy after 5000 years and sprang to life when planted is the type of the never ending influence of human acts Action can never die without producing action Now if our acts can only produce their appropriate effects on this plane of existence it follows that we must all come back to round out the circle of causes and effects This is the doctrine of reincarnation We are the slaves of law the slaves of conduct the slaves of thirst the slaves of desire the slaves of a thousand things Only by escaping from life can we escape from slavery to freedom God is the only one who is free God and freedom are one and the same

# THE REALITY AND THE SHADOW

*(Report of a lecture delivered in Oakland on March 8 1900 with editorial comments of the Oakland Tribune )*

Swami Vivekananda the Hindu philosopher delivered another lecture in Wendte Hall last evening His subject was The Reality and The Shadow He said

The soul of man is ever striving after certainty to find something that does not change It is never satisfied Wealth the gratification of ambition or of appetite are all changeable Once these are attained man is not content Religion is the science which teaches us whence to satisfy this longing after the unchangeable Behind all the local colours and derivations they teach the same thing—that there is reality only in the soul of man

The philosophy of Vedanta teaches that there are two worlds the external or sensory and the internal or subjective—the thought world

It posits three fundamental concepts—time space and causation From these is constituted Mayâ the essential groundwork of human thought not the product of thought This same conclusion was arrived at a later date by the great German philosopher Kant

My reality that of nature and of God is the same the difference is in form of manifestation The differentiation is caused by Maya As the contour of the shore may shape the ocean into bay strait or inlet but when this shaping force or Maya is removed the separate form disappears the differentiation ceases all is ocean again

The Swami then spoke of the roots of the theory of evolution to be found in the Vedanta philosophy

All modern religions start with the idea continued the speaker that man was once pure he fell and will become pure again I don t see where they get this idea The seat of knowledge is the soul external circumstance simply stimulates the soul knowledge is the power of the soul Century after century it has been manufacturing bodies The various forms of incarnation are merely successive chapters of the story of the life of the soul We are constantly building our bodies The whole universe is in a state of flux of expansion and contraction of change Vedanta holds that the soul never changes in essence but it is modified by Maya Nature is God limited by mind The evolution of nature is the modification of the soul The soul in essence is the same in all forms of being Its expression is modified by the body This unity of soul this common substance of humanity is the basis of ethics and morality In this sense all are one and to hurt one s brother is to hurt one s Self

Love is simply an expression of this infinite unity Upon what dualistic system can you explain love? One of the European philosophers says that kissing is a survival of cannibalism a kind of expression of how good you taste I don t believe it

What is it we all seek? Freedom All the effort and struggle of life is for freedom It is the march universal of races of worlds and of systems

If we are bound who bound us? No power can bind the Infinite but Itself

After the discourse an opportunity was afforded for asking question of the speaker who devoted half an hour to answering them

# WAY TO SALVATION

*(Report of a lecture delivered in Oakland on Monday March 12 1900 with editorial comments of the Oakland Enquirer )*

Wendte Hall of the First Unitarian Church was crowded last evening with a large audience to hear the Way to Salvation from the standpoint of the Hindu priest Swami Vivekananda This was the last lecture of a series of three which the Swami has delivered He said in part

One man says God is in heaven another that God is in nature and everywhere present But when the great crisis comes we find the goal is the same We all work on different plans but the end is not different

The two great watchwords of every great religion are renunciation and self sacrifice We all want the truth and we know that it must come whether we want it or not In a way we are all striving for that good And what prevents our reaching it? It is ourselves Your ancestors used to call it the devil but it is our own false self

We live in slavery and we would die if we were out of it We are like the man who lived in total dark ness for ninety years and when taken out in o the warm sunshine of nature prayed to be taken back to his dungeon You would not leave this old life to go into a newer and greater freedom which opens out

The great difficulty is to go to the heart of things These little degraded delusions of Jack So and So s who thinks he has an infinite soul however small he is with his different religions In one country all as a matter of religion a man has many wives in another one woman

has many husbands So some men have two gods some one God and some no God at all

But salvation is in work and love You learn something thoroughly in time you may not be able to call that thing to memory Yet it has sunk into your inner consciousness and is a part of you So as you work whether it be good or bad you shape your future course of life If you do good work with the idea of work—work for work s sake—you will go to heaven of your idea and dream of heaven

The history of the world is not of its great men of its demi gods but it is like the little islands of the sea which build themselves to great continents from fragment of the sea drift Then the history of the world is in the little acts of sacrifice performed in every house hold Man accepts religion because he does not wish to stand on his own judgment He takes it as the best way of getting out of a bad place

The salvation of man lies in the great love with which he loves his God Your wife says Oh John I could not live without you Some men when they lose their money have to be sent to the asylum Do you feel that way about your God? When you can give up money friends fathers and mothers brothers and sisters all that is in the world and only pray to God that He grant you something of His love then you have found salvation

# THE PEOPLE OF INDIA

*(Report of a lecture delivered in Oakland on Monday March 19 1900 with editorial comments of the Oakland Enquirer )*

The lecture which the Swami Vivekananda gave Monday night in his new course on The People of India was interesting not only for what he had to relate of the people of that country but for the insight into their mental attitude and prejudices which the speaker gave without really meaning it It is apparent that the Swami educated and intellectual man that he is is no admirer of Western civilisation He has evidently been a good deal embittered by the talk about child widows the oppression of women and other barbarisms alleged against the people of India and is somewhat inclined to resort to the *tu quoque* in reply

In commencing his talk he gave his hearers an idea of the racial characteristics of the people He said that the bond of unity in India as in other countries of Asia is not language or race but religion In Europe the race makes the nation but in Asia people of diverse origin and different tongues become one nation if they have the same religion The people of Northern India are divided into four great classes while in Southern India the languages are so entirely different from those of Northern India that there is no kinship whatever The people of Northern India belong to the great Aryan race to which all of the people of Europe except the Basques in the Pyrennees and the Finns are supposed to belong The Southern India people belong to the same race as the ancient Egyptians and the Semites To illustrate the difficulties of learning one another s languages

in India the Swami said that when he had occasion to go into Southern India he always talked with the native people in English unless they belonged to the select few who could speak Sanskrit

A good deal of the lecture was taken up in a discussion of the caste system which the Swami characterised by saying that it had its bad side but that its benefits outweighed its disadvantages In brief this caste system had grown by the practice of the son always following the business of the father In course of time the community came thus to be divided into a series of classes each held rigidly within its own boundaries But while this divided the people it also united them because all the members of a caste were bound to help their fellows in case of need And as no man could rise out of his caste the Hindus have no such struggles for social or personal supremacy as embitter the people of other countries

The worst feature of the caste is that it suppresses competition and the checking of competition has really been the cause of the political downfall of India and its conquest by foreign races

Respecting the much discussed subject of marriage the Hindus are socialistic and see nothing good in matches being made by a couple of young people who might be attached to one another without regard to the welfare of the community which is more important than that of any two persons Because I love Jennie and Jennie loves me said the Swami is no reason why we should be married

He denied that the condition of the child widows is as bad as has been represented saying that in India the position of widows in general is one of a great deal of influence because a large part of the property in the country is held by widows In fact so enviable is the position of widows that a woman or a man either might almost pray to be made a widow

The child widows or women who have been betrothed to children who died before marriage might be pitied if marriage were the only real object in life but according to the Hindu way of thinking marriage is rather a duty than a privilege and the denial of the right of child widows to marry is no particular hardship

# I AM THAT I AM

*(Notes of a lecture given in San Francisco on March 20 1900)*

The subject tonight is man man in contrast with nature For a long time the word nature was used *almost exclusively to denote external phenomena* These phenomena were found to behave methodically and they often repeated themselves that which had happened in the past happened again—nothing happened only once Thus it was concluded that nature was uniform Uni formity is closely associated with the idea of nature without it natural phenomena cannot be understood This uniformity is the basis of what we call law

Gradually the word nature and the idea of uni formity came to be applied also to internal phenomena the phenomena of life and mind All that is differentiated is nature Nature is the quality of the plant the quality of the animal and the quality of man Man s life behaves according to definite methods so does his mind Thoughts do not just happen there is a certain method in their rise existence and fall In other words just as external phenomena are bound by law internal pheno mena that is to say the life and mind of man are also bound by law

When we consider law in relation to man s mind and existence it is at once obvious that there can be no such thing as free will and free existence We know how animal nature is wholly regulated by law The animal does not appear to exercise any free will The same is true of man human nature also is bound by law The law governing the functions of the human mind is called the law of Karma

Nobody has even seen anything produced out of )thing if anything arises in the mind that also must ive been produced from something When we speak free will we mean the will is not caused by anything it that cannot be true the will is caused and since it caused it cannot be free—it is bound by law That am willing to talk to you and you come to listen to me at is law Everything that I do or think or feel every irt of my conduct or behaviour my every movement all is caused and therefore not free This regulation of ir life and mind—that is the law of Karma

If such a doctrine had been introduced in olden times to a Western community it would have produced a emendous commotion The Western man does not ant to think his mind is governed by law In India was accepted as soon as it was propounded by the ost ancient Indian system of philosophy There is no ch thing as freedom of the mind it cannot be Why d not this teaching create any disturbance in the Indian ind? India received it calmly that is the speciality Indian thought wherein it differs from every other ought in the world

The external and internal natures are not two fferent things they are really one Nature is the sum tal of all phenomena Nature means all that is all at moves We make a tremendous distinction between atter and mind we think that the mind is entirely dif rent from matter Actually they are but one nature lf of which is continually acting on the other half atter is pressing upon the mind in the form of various nsations These sensations are nothing but force The rce from the outside evokes the force within From e will to respond to or get away from the outer force e inner force becomes what we call thought

Both matter and mind are really nothing but forces d if you analyse them far enough you will find that at

root they are one The very fact that the external force can somehow evoke the internal force shows that some where they join each other—they must be continuous and therefore basically the same force When you get to the root of things they become simple and general Since the same force appears in one form as matter and in another form as mind there is no reason to think matter and mind are different Mind is changed into matter matter is changed into mind Thought force becomes nerve force muscular force muscular and nervous force becomes thought force Nature is all this force whether expressed as matter or mind

The difference between the subtlest mind and the grossest matter is only one of degree Therefore the whole universe may be called either mind or matter it does not matter which You may call the mind refined matter or the body concretised mind it makes little difference by which name you call which All the troubles arising from the conflict between materialism and spirituality are due to wrong thinking Actually there is no difference between the two I and the lowest pig differ only in degree It is less manifested I am more Sometimes I am worse the pig is better

Nor is it any use discussing which comes first—mind or matter Is the mind first out of which matter has come? Or is matter first out of which the mind has come? Many of the philosophical arguments proceed from these futile questions It is like asking whether the egg or the hen is first Both are first and both last—mind and matter matter and mind If I say matter exists first and matter growing finer and finer becomes mind then I must admit that before matter there must have been mind Otherwise where did matter come from? Matter precedes mind mind precedes matter It is the hen and egg question all through

The whole of nature is bound by the law of causa

tion and is in time and space We cannot see anything outside of space yet we do not know space We cannot perceive anything outside of time yet we do not know time We cannot understand anything except in terms of causality yet we do not know what causation is These three things—time space and causality—are in and through every phenomenon but they are not phenomena They are as it were the forms or moulds in which every thing must be cast before it can be apprehended Matter is substance plus time space and causation Mind is substance plus time space and causation

This fact can be expressed in another way Every thing is substance plus name and form Name and form come and go but substance remains ever the same Substance form and name make this pitcher When it is broken you do not call it pitcher any more nor do you see its pitcher form Its name and form vanish but its substance remains All the differentiation in substance is made by name and form These are not real because they vanish What we call nature is not the substance unchanging and indestructible Nature is time space and causation Nature is name and form Nature is Mâyâ Maya means name and form into which every thing is cast Maya is not real We could not destroy it or change if it were real The substance is noumenon Maya is phenomenon There is the real me which nothing can destroy and there is the phenomenal me which is continually changing and disappearing

The fact is everything existing has two aspects One is noumenal unchanging and indestructible the other is phenomenal changing and destructible Man in his true nature is substance soul spirit This soul this spirit never changes is never destroyed but it appears to be clothed with a form and to have a name associated with it This form and name are not immutable or indestructible they continually change and are

Yet men foolishly seek immortality in this changeable aspect in the body and mind—they want to have an eternal body I do not want that kind of immortality

What is the relation between me and nature? In so far as nature stands for name and form or for time space and causality I am not part of nature because I am free I am immortal I am unchanging and infinite The question does not arise whether I have free will or not I am beyond any will at all Wherever there is will it is never free There is no freedom of will whatever There is freedom of that which becomes will when name and form get hold of it making it their slave That substance—the soul—as it were moulds itself as it were throws itself into the cast of name and form and immediately becomes bound whereas it was free before And yet its original nature is still there That is why it says I am free in spite of all this bondage I am free And it never forgets this

But when the soul has become the will it is no more really free Nature pulls the strings and it has to dance as nature wants it to Thus have you and I danced throughout the years All the things that we see do feel know all our thoughts and actions are nothing but dancing to the dictates of nature There has been and there is no freedom in any of this From the lowest to the highest all thoughts and actions are bound by law and none of these pertain to our real Self

My true Self is beyond all law Be in tune with slavery with nature and you live under law you are happy under law But the more you obey nature and its dictates the more bound you become the more in harmony with ignorance you are the more are you at the beck and call of everything in the universe Is this harmony with nature this obedience to law in accord with the true nature and destiny of man? What mineral ever quarrelled with and disputed any law? What tree

or plant ever defied any law? This table is in harmony with nature with law but a table it remains always it does not become any better Man begins to struggle and fight against nature He makes many mistakes he suffers But eventually he conquers nature and realises his free dom When he is free nature becomes his slave

The awakening of the soul to its bondage and its effort to stand up and assert itself—this is called life Success in this struggle is called evolution The even tual triumph when all the slavery is blown away is called salvation Nirvâna freedom Everything in the universe is struggling for liberty When I am bound by nature by name and form by time space and causality I do not know what I truly am But even in this bondage my real Self is not completely lost I strain against the bonds one by one they break and I become conscious of my innate grandeur Then comes complete libera tion I attain to the clearest and fullest consciousness of myself—I know that I am the infinite spirit the master of nature not its slave Beyond all differentiation and com bination beyond space time and causation I am that I am

# UNITY

*(Notes of a lecture delivered at the Vedanta Society New York in June 1900)*

The different sectarian systems of India all radiate from one central idea of unity or dualism

They are all under Vedanta all interpreted by it Their final essence is the teaching of unity This which we see as many is God We perceive matter the world manifold sensation Yet there is but one existence

These various names mark only differences of degree in the expression of that One The worm of today is the God of tomorrow These distinctions which we so love are all parts of one infinite fact and only differ in the degree of expression That one infinite fact is the attainment of freedom

However mistaken we may be as to the method all our struggle is really for freedom We seek neither misery nor happiness but freedom This one aim is the secret of the insatiable thirst of man Man s thirst says the Hindu man s thirst says the Buddhist is a burning unquenchable thirst for more and more You Americans are always looking for more pleasure more enjoyment You cannot be satisfied true but at bottom what you seek is freedom

This vastness of his desire is really the sign of man s own infinitude It is because he is infinite that he can only be satisfied when his desire is infinite and its fulfilment infinite

What then can satisfy man? Not gold Not enjoyment Not beauty One Infinite alone can satisfy him

and that Infinite is Himself When he realises this then alone comes freedom

This flute with the sense organs as its keyholes
With all its sensations perceptions and song
Is singing only one thing It longs to go back to the
wood whence it was cut!
Deliver thou thyself by thyself!
Ah do not let thyself sink!
For thou art thyself thy greatest friend
And thou thyself thy greatest enemy

Who can help the Infinite? Even the hand that comes to you through the darkness will have to be your own

Fear and desire are the two causes of all this and who creates them? We ourselves Our lives are but a passing from dream to dream Man the infinite dreamer dreaming finite dreams!

Oh the blessedness of it that nothing external can be eternal! They little know what they mean whose hearts quake when they hear that nothing in this relative world can be eternal

I am the infinite blue sky Over me pass these clouds of various colours remain a moment and vanish I am the same eternal blue I am the witness the same eternal witness of all I see therefore nature exists I do not see therefore she does not Not one of us could see or speak if this infinite unity were broken for a moment

# THE WORSHIP OF THE DIVINE MOTHER

*(Fragmentary notes taken on a Sunday afternoon in New York in June 1900)*

From the tribal or clan God man arrives in every religion at the sum the God of gods

Confucius alone has expressed the one eternal idea of ethics Manu Deva was transformed into Ahriman In India the mythological expression was suppressed but the idea remained In an old Veda is found the Mantra I am the empress of all that lives the power in everything

Mother worship is a distinct philosophy in itself Power is the first of our ideas It impinges upon man at every step power felt within is the soul without nature And the battle between the two makes human life All that we know or feel is but the resultant of these two forces Man saw that the sun shines on the good and evil alike Here was a new idea of God as the Universal Power behind all—the Mother idea was born

Activity according to Sânkhya belongs to Prakriti to nature not to Purusha or soul Of all feminine types in India the mother is pre eminent The mother stands by her child through everything Wife and children may desert a man but his mother never! Mother again is the impartial energy of the universe because of the colourless love that asks not desires not cares not for the evil in her child but loves him the more And today Mother worship is the worship of all the highest classes amongst the Hindus

The goal can only be described as something not yet attained Here there is no goal This world is all

alike the play of Mother But we forget this Even misery can be enjoyed when there is no selfishness when we have become the witness of our own lives The thinker of this philosophy has been struck by the idea that one *power* is behind all phenomena In our thought of God there is human limitation personality with Shakti comes the idea of One Universal Power I stretch the bow of Rudra when He desires to kill says Shakti The Upanishads did not develop this thought for Vedanta does not care for the God idea But in the Gita comes the significant saying to Arjuna I am the real and I am the unreal I bring good and I bring evil

Again the idea slept Later came the new philosophy This universe is a composite fact of good and evil and one Power must be manifesting through both A lame one legged universe makes only a lame one legged God And this in the end lands us in want of sympathy and makes us brutal The ethics built upon such a concept is an ethics of brutality The saint hates the sinner and the sinner struggles against the saint Yet even this leads onward For finally the wicked self sufficient mind will die crushed under repeated blows and then we shall awake and know the Mother

Eternal unquestioning self surrender to Mother alone can give us peace Love Her for Herself without fear or favour Love Her because you are Her child See Her in all good and bad alike Then alone will come Sameness and Bliss Eternal that is Mother Herself when we realise Her thus Until then misery will pursue us Only resting in Mother are we safe

# THE ESSENCE OF RELIGION

*(Report of a lecture delivered in America)*

In France the rights of man was long a watch word of the race in America the rights of woman still beseech the public ear in India we have concerned ourselves always with the rights of Gods

The Vedanta includes all sects We have a peculiar idea in India Suppose I had a child I should not teach him any religion but the practice of concentrating his mind and just one line of prayer Not prayer in your sense but this I meditate on Him who is the Creator of the universe may He enlighten my mind Then when old enough he goes about hearing the different philosophies and teachings till he finds that which seems the truth to him He then becomes the Shishya or disciple of the Guru (teacher) who is teaching that truth He may choose to worship Christ or Buddha or Mohammed we recognise the rights of each of these and the right of all souls to their own Ishta or chosen way It is therefore quite possible for my son to be a Buddhist my wife to be a Christian and myself a Mohammedan at one and the same time with absolute freedom from friction

We are all glad to remember that all roads lead to God and that the reformation of the world does not depend upon all seeing God through our eyes Our fundamental idea is that your doctrine cannot be mine nor mine yours I am my own sect It is true that we have created a system of religion in India which we believe to be the only rational religious system extant but our belief in its rationality rests upon its all inclusion of the searchers after God its absolute charity towards

all forms of worship and its eternal receptivity of those ideas trending towards the evolution of God in the universe We admit the imperfection of our system be cause the reality must be beyond all systems and in this admission lies the portent and promise of an eternal growth Sects ceremonies and books so far as they are the means of a man s realising his own nature are all right when he has realised that he gives up everything I reject the Vedas! is the last word of the Vedanta philosophy Ritual hymns and scriptures through which he has travelled to freedom vanish for him So ham So ham —I am He—bursts from his lips and to say Thou to God is blasphemy for he is one with the Father

Personally I take as much of the Vedas as agree with reason Parts of the Vedas are apparently contradictory They are not considered as inspired in the Western sense of the word but as the sum total of the knowledge of God omniscience which we possess But to say that only those books which we call the Vedas contain this knowledge is mere sophistry We know it is shared in varying degrees by the scriptures of all sects Manu says that part only of the Vedas which agrees with reason is the Vedas and many of our philosophers have taken this view Of all the scriptures of the world it is the Vedas alone which declare that the study of the Vedas is secondary

The real study is that by which we realise the Unchangeable and that is neither by reading nor believing nor reasoning but by superconscious percep tion and Samâdhi When a man has reached that perfect state he is of the same nature as the Personal God I and my Father are one He knows himself one with Brahman the Absolute and projects himself as does the Personal God The Personal God is the Absolute looked at through the haze of Mâyâ—ignorance

When we approach Him with the five senses we can only see Him as the Personal God The idea is that the Self cannot be objectified How can the knower know himself? But he can cast a shadow as it were and the highest form of that shadow that attempt of objectifying one s Self is the Personal God The Self is the eternal subject and we are eternally struggling to objectify that Self and out of that struggle has come this phenomenon of the universe that which we call matter But these are weak attempts and the highest objectification of the Self possible to us is the Personal God

An honest God s the noblest work of man said one of your Western thinkers God is as man is No man can see God but through these human manifestations Talk as you may try as you may you cannot think of God but as a man and as you are He is An ignorant man was asked to make an image of the God Shiva and after many days of hard struggle he succeeded only in manufacturing the image of a monkey! So when we *try to think of God as He is in His absolute perfection* we meet with miserable failure because we are limited and bound by our present constitution to see God as man If the buffaloes desire to worship God they in keeping with their own nature will see Him as a huge buffalo if a fish wishes to worship God its concept of Him would inevitably be a big fish and man must think of Him as man Suppose man the buffalo and the fish represent so many different vessels that these vessels all go to the sea of God to be filled each according to its shape and capacity In man the water takes the shape of man in the buffalo the shape of the buffalo and in the fish the shape of the fish but in each of these vessels is the same water of the sea of God

Two kinds of men do not worship God as man—the human brute who has no religion and the Paramahamsa who has transcended the limits of his own human nature

To him all nature has become his own Self he alone can worship God as He is The human brute does not worship because of his ignorance and the Jivanmuktas (free souls) do not worship because they have realised God in themselves So ham So ham —I am He— they say and how shall they worship themselves?

I will tell you a little story There was once a baby lion left by its dying mother among some sheep The sheep fed it and gave it shelter The lion grew apace *and said Ba a a when the sheep said Ba a a* One day another lion came by What do you do here? said the second lion in astonishment for he heard the sheep lion bleating with the rest Ba a a said the other I am a little sheep I am a little sheep I am frightened Nonsense! roared the first lion come with me I will show you And he took him to the side of a smooth stream and showed him that which was reflected therein You are a lion look at me look at the sheep look at yourself And the sheep lion looked and then he said Ba a a I do not look like the sheep— it is true I am a lion! and with that he roared a roar that shook the hills to their depths

That is it We are lions in sheep s clothing of habit we are hypnotised into weakness by our surroundings And the province of Vedanta is the self dehypnotisa tion The goal to be reached is freedom I disagree with the idea that freedom is obedience to the laws of nature I do not understand what that means According to the history of human progress it is disobedience to nature that has constituted that progress It may be said that the conquest of lower laws was through the higher but even there the conquering mind was still seeking free dom as soon as it found the struggle was through law it wished to conquer that also So the ideal is always freedom The trees never disobey law I never saw a

cow steal An oyster never told a lie Yet these are not greater than man

Obedience to law in the last issue would make of us simply matter—either in society or in politics or religion This life is a tremendous assertion of freedom excess of laws means death No nation possesses so many laws as the Hindus and the result is the national death But the Hindus had one peculiar idea—they never made any doctrines or dogmas in religion and the latter has had the greatest growth Therein are we practical—wherein you are impractical—in our religion

A few men come together in America and say We will have a stock company in five minutes it is done In India twenty men may discuss a stock company for as many weeks and it may not be formed but if one believes that by holding up his hands in air for forty years he will attain wisdom it will be done! So we are practical in ours you in your way

But the way of all ways to realisation is love When one loves the Lord the whole universe becomes dear to one because it is all His Everything is His and He is my Lover I love Him says the Bhakta In this way everything becomes sacred to the Bhakta because all things are His How then may we hurt any one? How then may we not love another? With the love of God will come as its effect the love of every one in the long run The nearer we approach God the more do we begin to see that all things abide in Him our heart will become a perennial fountain of love Man is transformed in the presence of this Light of Love and realises at last the beautiful and inspiring truth that Love Lover and the Beloved are really one

# SAYINGS AND UTTERANCES

## SAYINGS AND UTTERANCES

1 Did Buddha teach that the many was real and the ego unreal while orthodox Hindusim regards the One as the real and the many as unreal? the Swami was asked Yes answered the Swami And what Rama krishna Paramahamsa and I have added to this is that the Many and the One are the same Reality perceived by the same mind at different times and in different attitudes

2 Remember! he said once to a disciple Remember! the message of India is always *Not the soul for nature but nature for the soul!*

3 What the world wants today is twenty men and women who can dare to stand in the street yonder and say that they possess nothing but God Who will go? Why should one fear? If this is true what else could matter? *If it is not true what do our lives matter?*

4 Oh how calm would be the work of one who really understood the divinity of man! For such there is nothing to do save to open men s eyes All the rest does itself

5 He (Shri Ramakrishna) was contented simply to live that great life and to leave it to others to find the explanation!

6 Plans! Plans! Swami Vivekananda explained in indignation when one of his disciples had offered him some piece of worldly wisdom That is why Western people can never create a religion! If any of you ever did it was only a few Catholic saints who had no plans Religion was never preached by planners!

7 Social life in the West is like a peal of laughter but underneath it is a wail It ends in a sob The fun and frivolity are all on the surface really it is

full of tragic intensity Now here it is sad and gloomy on the outside but underneath are carelessness and merriment

We have a theory that the universe is God s manifestation of Himself just for fun that the Incarnations came and lived here just for fun Play it was all play Why was Christ crucified? It was mere play And so of life Just play with the Lord Say It is all play It is all play Do *you* do anything?

8 I am persuaded that a leader is not made in one life He has to be born for it For the difficulty is not in organisation and making plans the test the real test of a leader lies in holding widely different people together along the line of their common sympathies And this can only be done unconsciously never by trying

9 In explanation of Plato s doctrine of Ideas Swamiji said And so you see all this is but a feeble manifestation of the great ideas which alone are real and perfect Somewhere is an ideal you and here is an attempt to manifest it! The attempt falls short still in many ways Still go on! You will interpret the ideal some day

10 Answering the remark of a disciple who felt that it would better for her to come back to this life again and again and help the causes that were of interest to her instead of striving for personal salvation with a deep longing to get out of life the Swami retorted quickly That s because you cannot overcome the idea of progress But things do not grow better They remain as they are and *we* grow better by the change we make in them

11 It was in Almora that a certain elderly man with a face full of amiable weakness came and put him a question about Karma What were they to do he asked whose Karma it was to see the strong oppress the

weak? The Swami turned on him in surprised indignation Why thrash the strong of course! he said You forget your own part in this Karma Yours is always the right to rebel!

12 Ought one to seek an opportunity of death in defence of right or ought one to take the lesson of the Gita and learn never to react? the Swami was asked I am for no reaction said the Swami speaking slowly and with a long pause Then he added —for Sannyasins Self defence for the householder!

13 It is a mistake to hold that with all men pleasure is the motive Quite as many are born to seek after pain Let us worship the Terror for Its own sake

14 Ramakrishna Paramahamsa was the only man who ever had the courage to say that we must speak to all men in their own language!

15 How I used to hate Kâli! he said referring to his own days of doubts in accepting the Kali ideal And all Her ways! That was the ground of my six years fight—that I would not accept Her But I had to accept Her at last! Ramakrishna Paramahamsa dedicated me to Her and now I believe that She guides me in everything I do and does with me what She will Yet I fought so long! I loved him you see and that was what held me I saw his marvellous purity I felt his wonderful love His greatness had not dawned on me then All that came afterwards when I had given in At that time I thought him a brain sick baby always seeing visions and the rest I hated it And then I too had to accept Her!

No the thing that made me do it is a secret that will die with me I had great misfortunes at that time It was an opportunity She made a slave of me Those were the very words a slave of you And *Ramakrishna Paramahamsa made me over to Her* Strange! He lived only two years after doing that and

most of the time he was suffering Not more than six months did he keep his own health and brightness

Guru Nanak was like that you know looking for the one disciple to whom he would give his power And he passed over all his own family—his children were as nothing to him—till he came upon the boy to whom he gave it and then he could die

The future you say will call Ramakrishna Paramahamsa an Incarnation of Kali? Yes I think there s no doubt that She worked up the body of Ramakrishna for Her own ends

*You see I cannot but believe that there is some where a great Power that thinks of Herself as feminine and called Kali and Mother* And I believe in Brahman too But is it not always like that? Is it not the multitude of cells in the body that make up the personality the many brain centres not the one that produce consciousness? Unity in complexity! Just so! And why should it be different with Brahman? It *is* Brahman It *is* the One And yet—and yet—it is the gods too!

16 The older I grow the more everything seems to me to lie in manliness This is my new gospel

17 Referring to some European reference to cannibalism as if it were a normal part of life in some societies the Swami remarked That is not true! No nation ever ate human flesh save as a religious sacrifice or in war out of revenge Don t you see? That s not the way of gregarious animals! It would cut at the root of social life!

18 Sex love and creation! These are at the root of most religions And these in India are called Vaishnavism and in the West Christianity How few have dared to worship Death or Kali! Let us worship Death! Let us embrace the Terrible because it is terrible not asking

that it be toned down Let us take misery for misery s own sake!

19 The three cycles of Buddhism were five hundred years of the Law five hundred years of images and five hundred years of Tantras You must not imagine that there was ever a religion in India called Buddhism with temples and priests of its own order! Nothing of the sort It was always within Hinduism Only at one time the influence of Buddha was paramount and this made the nation monastic

20 The conservative s whole ideal is *submission* Your ideal is struggle Consequently it is *we* who enjoy the life and never you! You are always striving to change yours to something better and before a millionth part of the change is carried out you die The Western ideal is to be doing the Eastern to be suffering The perfect life would be a wonderful harmony between doing and suffering But that can never be

In our system it is accepted that a man cannot have all he desires Life is subjected to many restraints This is ugly yet it brings out points of light and strength Our liberals see only the ugliness and try to throw it off But they substitute something quite as bad and the new custom takes as long as the old for us to work to its centres of strength

Will is not strengthened by change It is weakened and enslaved by it But we must be always absorbing Will grows stronger by absorption And consciously or unconsciously will is the one thing in the world that we admire Suttee is great in the eyes of the whole world because of the will that it manifests

It is selfishness that we must seek to eliminate I find that whenever I have made a mistake in my life it has always been because *self* entered into the calculation Where self has not been involved my judgement has gone straight to the mark

Without self there would have been no religious system If man had not wanted anything for himself do you think he would have had all this praying and worship? Why! he would never have thought of God at all except perhaps for a little praise now and then at the sight of a beautiful landscape or something And that is the only attitude there ought to be All praise and thanks If only we were rid of self!

You are quite wrong when you think that fighting is a sign of growth It is not so at all Absorption is the sign Hinduism is a very genius of absorption We have never cared for fighting Of course we could strike a blow now and then in defence of our homes! That was right But we never cared for fighting for its own sake Every one had to learn that So let these races of new comers whirl on! They ll all be taken into Hinduism in the end!

21 The totality of all souls not the human alone is the Personal God The will of the Totality nothing can resist It is what we know as law And this is what we mean by Shiva and Kali and so on

22 Worship the Terrible! Worship Death! All else is vain All struggle is vain That is the last lesson Yet this is not the coward s love of death not the love of the weak or the suicide It is the welcome of the strong man who has sounded everything to its depths and *knows* that there is no alternative

23 I disagree with all those who are giving their superstitions back to my people Like the Egyptologist s interest in Egypt it is easy to feel an interest in India that is purely selfish One may desire to see again the India of one s books one s studies one s dreams *My* hope is to see again the strong points of that India re inforced by the strong points of this age only in a natural way The new stage of things must be a *growth* from within

So I preach only the Upanishads If you look you will find that I have never quoted anything but the Upanishads And of the Upanishads it is only that one idea *strength* The quintessence of the Vedas and Vedanta and all lies in that one word Buddha s teaching was non resistance or non injury But I think this is a better way of teaching the same thing For behind that non injury lay a dreadful weakness It is weakness that conceives the idea of resistance I do not think of punishing or escaping from a drop of sea spray It is nothing to me Yet to the mosquito it would be serious Now I would make all injury like that Strength and fearlessness My own ideal is that saint whom they killed in the Mutiny and who broke his silence when stabbed to the heart to say And thou also art He!

But you may ask—what is the place of Ramakrishna in this scheme?

He is the method that wonderful unconscious method! He did not understand himself He knew nothing of England or the English save that they were queer folk from over the sea But he lived that great life and I read the meaning Never a word of condemnation for any! Once I had been attacking one of our sects of diabolists I had been raving on for three hours and he had listened quietly Well well! said the old man as I finished perhaps every house may have a back door Who knows?

Hitherto the great fault of our Indian religion has lain in its knowing only two words renunciation and Mukti Only Mukti here! Nothing for the householder!

But these are the very people whom I want to help For are not all souls of the same quality? Is not the goal of all the same?

And so strength must come to the nation through education

24 The Puranas the Swami considered to be the effort of Hinduism to bring lofty ideas to the door of the masses There had been only one mind in India that had foreseen this need that of Krishna probably the greatest man who ever lived

The Swami said Thus is created a religion that ends in the worship of Vishnu as the preservation and enjoyment of life leading to the realisation of God Our last movement Chaitanyaism you remember was for enjoyment At the same time Jainism represents the other extreme the slow destruction of the body by self torture Hence Buddhism you see is reformed Jainism and this is the real meaning of Buddha s leaving the company of the five ascetics In India in every age there is a cycle of sects which represents every gradation of physical practice from the extreme of self torture to the extreme of excess And during the same period will always be developed a metaphysical cycle which represents the realisation of God as taking place by every gradation of means from that of using the senses as an instrument to that of the annihilation of the senses Thus Hinduism always consists as it were of two counter spirals completing each other round a single axis

Yes! Vaishnavism says it is all right! this tremendous love for father for mother for brother husband or child! It is all right if only you will think that Krishna is the child and when you give him food that you are feeding Krishna! This was the cry of Chaitanya Worship God *through* the senses as against the Vedantic cry Control the senses! suppress the senses!

I see that India is a young and living organism Europe also is young and living Neither has arrived at such a stage of development that we can safely criticise its institutions They are two great experiments neither

of which is yet complete In India we have social com munism with the light of Advaita—that is spiritual individualism—playing on and around it in Europe you are socially individualists but your thought is dualistic which is spiritual communism Thus the one consists of socialist institutions hedged in by individualist thought while the other is made up of individualist institutions within the hedge of communistic thought

Now we must help the Indian experiment as it is Movements which do not attempt to help things as they are *are from that point of view no good In Europe* for instance I respect marriage as highly as non marriage Never forget that a man is made great and perfect as much by his faults as by his virtues So we must not seek to rob a nation of its character even if it could be proved that the character was all faults

25 You may always say that the image is God The error you have to avoid is to think God the image

26 The Swami was appealed to on one occasion to condemn the fetishism of the Hottentot I do not know he answered what fetishism is! Then a lurid picture was hastily put before him of the object alternately worshipped beaten and thanked I do that! he exclaimed Don t you see he went on a moment later in hot resentment of injustice done to the lowly and absent Don t you see that there is no fetishism? Oh your hearts are steeled that you cannot see that the child is right! The child sees person every where Knowledge robs us of the child s vision But at last through higher knowledge we win back to it He connects a living power with rocks sticks trees and the rest And is there not a living Power behind them? It is *symbolism* not fetishism! Can you not see?

27 One day he told the story of Satyabhamâ s sacrifice and how the word Krishna written on a piece of paper and thrown into the balance made Krishna

himself on the other side kick the beam Orthodox Hinduism he began makes Shruti the sound every thing The *thing* is but a feeble manifestation of the pre existing and eternal idea So the *name* of God is everything God Himself is merely the objectification of that idea in the eternal mind Your own name is infinitely more perfect than the person you! The name of God is greater than God Guard your speech!

28 I would not worship even the Greek gods for they were separate from humanity! Only those should be worshipped who are like ourselves but greater The difference between the gods and me must be a difference only of degree

29 A stone falls and crushes a worm Hence we infer that all stones falling crush worms Why do we thus immediately reapply a perception? Ex perience says one But it happens let us suppose for the first time Throw a baby into the air and it cries Experience from past lives? But why applied to the future? Because there is a real connection between certain things a *pervasiveness* only it lies with us to see that the quality neither overlaps nor falls short of the instance On this discrimination depends all human knowledge

With regard to fallacies it must be remembered that direct perception itself can only be a proof provided the instrument the method and the persistence of the perception are all maintained pure Disease or emo tion will have the effect of disturbing the observation *Therefore direct perception itself is but a mode of inference* Therefore all human knowledge is uncertain and may be erroneous Who is a true witness? He is a true witness to whom the thing said is a direct percep tion Therefore the Vedas are true because they con sist of the evidence of competent persons But is this

power of perception peculiar to any? No! The Rishi the Aryan and the Mlechchha all alike have it

Modern Bengal holds that evidence is only a special case of direct perception and that analogy and parity of reasoning are only bad inferences Therefore of actual proofs there are only two direct perception and inference

One set of persons you see gives priority to the external manifestation the other to the internal idea Which is prior the bird to the egg or the egg to the bird? Does the oil hold the cup or the cup the oil? This is a problem of which there is no solution Give it up! Escape from Maya!

30 Why should I care if the world itself were to disappear? According to my philosophy that you know would be a very good thing! But in fact all that is against me must be with me in the end Am I not Her soldier?

31 Yes my own life is guided by the enthusiasm of a certain great personality but what of that? Inspiration was never filtered out to the world through one man!

It is true I believe Ramakrishna Paramahamsa to have been inspired But then I am myself inspired also And you are inspired And your disciples will be and theirs after them and so on to the end of time!

Don t you see that the age for esoteric interpretations is over? For good or for ill that day is vanished never to return Truth in the future is to be open to the world!

32 Buddha made the fatal mistake of thinking that the whole world could be lifted to the height of the Upanishads And self interest spoilt all Krishna was wiser because He was more politic But Buddha would have no compromise The world before now has seen even the Avatâra ruined by compromise tortured to death for want of recognition and lost But Buddha would

have been worshipped as God in his own lifetime all over Asia for a moment s compromise And his reply was only Buddhahood is an achievement not a person! Verily was He the only man in the world who was ever quite sane the only sane man ever born!

33 People had told the Swami in the West that the greatness of Buddha would have been more appealing had *he been crucified! This he stigmatised as Roman* brutality and pointed out The lowest and most animal liking is for action Therefore the world will always love the epic Fortunately for India however she has never produced a Milton with his hurled headlong down the steep abyss! The whole of that were well exchanged for a couple of lines of Browning! It had been this epic vigour of the story in his opinion that had appealed to the Roman The crucifixion it was that carried Christianity over the Roman world Yes Yes! he reiterated You Western folk want *action!* You cannot yet perceive the poetry of every common little incident in life! What beauty could be greater than that of the story of the young mother coming to Buddha with her dead boy? Or the incident of the goats? You see the Great Renunciation was not new in India!

But *after Nirvana* look at the poetry!

It is a wet night and he comes to the cowherd s hut and gathers in to the wall under the dripping eaves The rain is pouring down and the wind rising

Within the cowherd catches a glimpse of a face through the window and thinks Ha ha! Yellow garb! stay there! It s good enough for you! And then he begins to sing

My cattle are housed and the fire burns bright My wife is safe and my babes sleep sweet! Therefore ye may rain if ye will O clouds tonight!

And the Buddha answers from without My mind is controlled My senses are all gathered in *My heart*

firm Therefore ye may rain if you will O clouds tonight!

Again the cowherd The fields are reaped and the hay is all fast in the barn The stream is full and the roads are firm Therefore ye may rain if ye will O clouds tonight

And so it goes on till at last the cowherd rises in contrition and wonder and becomes a disciple

Or what could be more beautiful than the barber s story?

The Blessed One passed by my house
*my* house—the Barber s!
I ran but He turned and awaited me
Awaited *me*—the Barber!
I said May I speak O Lord with Thee?
And He said Yes!
Yes! to *me*—the Barber!
And I said Is Nirvana for such as I?
And He said Yes!
Even for *me*—the Barber!
And I said May I follow after Thee?
And He said Oh yes!
Even *I*—the Barber!
And I said May I stay O Lord near Thee?
And He said Thou mayest!
Even to *me*—the poor Barber!

34 The great point of contrast between Buddhism and Hinduism lies in the fact that Buddhism said Realise all this as illusion while Hinduism said Realise that within the illusion is the Real Of *how* this was to be done Hinduism never presumed to enunciate any rigid law The Buddhist command could only be carried out through monasticism the Hindu might be fulfilled through any state of life All alike were roads to the One Real One of the highest and greatest expressions of the Faith is put into the mouth of a butcher preachi

by the orders of a married woman to a Sannyasin Thus Buddhism became the religion of a monastic order but Hinduism in spite of its exaltation of monasticism remains ever the religion of faithfulness to daily duty whatever it be as the path by which man may attain God

35 Lay down the rules for your group and formulate your ideas the Swami said dealing with *the monastic ideal for women* and put in a little universalism if there is room for it But remember that not more than half a dozen people in the whole world are ever at any time ready for this! There must be room for sects as well as for rising above sects You will have to manufacture your own tools Frame laws but frame them in such a fashion that when people are ready to do without them they can burst them asunder Our originality lies in combining perfect freedom with perfect authority This can be done even in monasticism

36 Two different races mix and fuse and out of them rises one strong distinct type This tries to save itself from admixture and here you see the beginning of caste Look at the apple The best specimens have been produced by crossing but once crossed we try to preserve the variety intact

37 Referring to education of girls in India he said In the worship of the gods you must of course use images But you can change these Kali need not always be in one position Encourage your girls to think of new ways of picturing Her Have a hundred different conceptions of Saraswati Let them draw and model and paint their own ideas

In the chapel the pitcher on the lowest step of the altar must be always full of water and lights in great Tamil butter lamps must be always burning If in addition the maintenance of perpetual adoration could

be organised nothing could be more in accord with Hindu feeling

But the ceremonies employed must themselves be Vedic There must be a Vedic altar on which at the hour of worship to light the Vedic fire And the children must be present to share in the service of oblation This is a rite which would claim the respect of the whole of India

Gather all sorts of animals about you The cow makes a fine beginning But you will also have dogs and cats and birds and others Let the children have a time for going to feed and look after these

Then there is the sacrifice of learning That is the most beautiful of all Do you know that every book is holy in India not the Vedas alone but the English and Mohammedan also? All are sacred

Revive the old arts Teach your girls fruit modelling with hardened milk Give them artistic cook ing and sewing Let them learn painting photography the cutting of designs in paper and gold and silver filigree and embroidery See that everyone knows some thing by which she can earn a living in case of need

And never forget Humanity! The idea of a humanitarian man worship exists in nucleus in India but it has never been sufficiently specialised Let your students develop it Make poetry make art of it Yes a daily worship at the feet of beggars after bathing and before the meal would be a wonderful practical training of heart and hand together On some days again the worship might be of children of your own pupils Or you might borrow babies and nurse and feed them What was it that Mataji[1] said to me? Swamiji! I have no help But these blessed ones I worship and they will take me to salvation! She feels you see that she

[1] Tapaswini Mataji Found ess of the Mahakali P thsh la Cal utt

is serving Umâ in the Kumâri and that is a wonderful thought with which to begin a school

38 Love is always a manifestation of bliss The least shadow of pain falling upon it is always a sign of physicality and selfishness

39 The West regards marriage as consisting in all that lies beyond the legal tie while in India it is thought of as a bond thrown by society round two people to unite them together for all eternity Those two must wed each other whether they will or not in life after life Each acquires half of all the merit of the other And if one seems in this life to have fallen hopelessly behind it is for the other only to wait and beat time till he or she catches up again!

40 Consciousness is a mere film between two oceans the subconscious and the superconscious

41 I could not believe my own ears when I heard Western people talking so much of consciousness! Consciousness? What does consciousness matter! Why it is nothing as compared with the unfathomable depths of the subconscious and the heights of the superconscious! *In this I could never be misled for had I not* seen Ramakrishna Paramahamsa gather in ten minutes from a man s subconscious mind the whole of his past and determine from that his future and his powers?

42 All these (visions etc ) are side issues They are not true Yoga They may have a certain usefulness in establishing indirectly the truth of our statements Even a little glimpse gives faith that there is something behind gross matter Yet those who spend time on such things run into grave dangers

These (psychic developments) are *frontier questions*! There can never be any certainty or stability of knowledge reached by their means Did I not say they were frontier questions? The boundary line is always shifting!

43 Now on the Advaitic side it is held that the soul neither comes nor goes and that all these spheres or layers of the universe are only so many varying products of Âkâsha and Prâna That is to say the lowest or most condensed is the Solar Sphere consisting of the visible universe in which Prana appears as physical force and Akasha as sensible matter The next is called the Lunar Sphere which surrounds the Solar Sphere This is not the moon at all but the habitation of the gods that is to say Prana appears in it as psychic forces and Akasha as Tanmâtras or fine particles Beyond this is the Electric Sphere that is to say a condition inseparable from Akasha and you can hardly tell whether electricity is force or matter Next is the Brahmaloka where there is neither Prana nor Akasha but both are merged into the mind stuff the primal energy And here—there being neither Prana nor Akasha—the Jiva contemplates the whole universe as Samasthi or the sum total of Mahat or mind This appears as a Purusha an abstract Universal Soul yet not the Absolute for still there is multiplicity From this the Jiva finds at last that Unity which is the end Advaitism says that these are the visions which arise in succession before the Jiva who himself neither goes nor comes and that in the same way this present vision has been projected The projection (Srishti) and dissolution must take place in the same order only one means going backward and the other coming out

Now as each individual
universe that universe is create
goes away with his liberation
others who are in bondage Now name and form constitute the universe A wave in the ocean is a wave only in so far as it is bound by name and form If the wave subsides it is the ocean but that name and form has immediately vanished for ever So that the name and form of a wave could never be without the water that

was fashioned into the wave by them yet the name and form themselves were not the wave They die as soon as ever it returns to water But other names and forms live on in relation to other waves This name and form is called Maya and the water is Brahman The wave was nothing but water all the time yet as a wave it had the name and form Again this name and form cannot remain for one moment separated from the wave although the wave as water can remain eternally separate from name and form But because the name and form can never be separated they can never be said to exist Yet they are not zero This is called Maya

44 I am the servant of the servants of the servants of Buddha Who was there ever like him?—the Lord—who never performed one action for himself—with a heart that embraced the whole world! So full of pity that he—prince and monk—would give his life to save a little goat! So loving that he sacrificed himself to the hunger of a tigress!—to the hospitality of a pariah and blessed him! And he came into my room when I was a boy and I fell at his feet! For I knew it was the Lord Himself!

45 He (Shuka) is the ideal Paramahamsa To him alone amongst men was it given to drink a handful of the waters of that one undivided Ocean of Sat Chit Ânanda—Existence Knowledge and Bliss Absolute! Most saints die having heard only the thunder of its waves upon the shore A few gain the vision and still fewer taste of It But he drank of the Sea of Bliss!

46 What is this idea of Bhakti without renunciation? It is most pernicious

47 We worship neither pain nor pleasure We seek through either to come at that which transcends them both

48 Shankaracharya had caught the rhythm of the Vedas the national cadence Indeed I always imagine that he had some vision such as mine when he was

young and recovered the ancient music that way Any way his whole life s work is nothing but that the throbbing of the beauty of the Vedas and the Upanishads

49 Though the love of a mother is in some ways greater yet the whole world takes the love of man and woman as the type (of the soul s relation to God) *No other has such tremendous idealising power* The beloved actually becomes what he is imagined to be This love transforms its object

50 Is it so easy to be Janaka? To sit on a throne absolutely unattached caring nothing for wealth or fame for wife or child? One after another in the West has told me that he has reached this But I could only say Such great men are not born in India!

51 Never forget to say to yourself and to teach to your children as the difference between a firefly and the blazing sun between the infinite ocean and a little *pond between a mustard seed and the mountain of* Meru such is the difference between the householder and the Sannyasin!

Everything is fraught with fear Renunciation alone is fearless

Blessed be even the fraudulent Sâdhus and those who have failed to carry out their vows inasmuch as they also have witnessed to their ideal and so are in some degree the cause of the success of others!

Let us never never forget our ideal!

52 The river is pure that flows the monk is pure that goes!

53 The Sannyasin who thinks of gold to desire it commits suicide

54 What do I care if Mahomet *was* a good man or Buddha? Does that alter my goodness or evil? Let us be good for our own sake on our own responsibility

55 You people in this country are so afraid of losing your in di vid u al i ty! Why you are not individuals yet When you realise your whole nature you will attain your true individuality not before There is another thing I am constantly hearing in this country and that is that we should live in harmony with nature Don t you know that all the progress ever made in the world was made by conquering nature? We are to resist nature at every point if we are to make any progress

56 In India they tell me I ought not to teach Advaita Vedanta to the people at large but I say I can make even a child understand it You cannot begin too early to teach the highest spiritual truths

57 The less you read the better Read the Gita and other good works on Vedanta That is all you need The present system of education is all wrong The mind is crammed with facts before it knows how to think Control of the mind should be taught first If I had my education to get over again and had any voice in the matter I would learn to master my mind first and then gather facts if I wanted them It takes people *a long time to learn things because they can t concen*trate their minds at will

58 If a bad time comes what of that? The pendulum must swing back to the other side But that is no better The thing to do is to stop it

# EPISTLES
(Fourth Series)

I*

*To Shri Pramadadas Mitra*

BAGHBAZAR
CALCUTTA
*28th November 1888*

DEAR SIR

I have received the book of Panini which you so kindly sent me Please accept my gratitude for the same

I had an attack of fever again—hence I could not reply to you immediately Please excuse I am ailing much I am praying to the Divine Mother to keep you happy physically and mentally

Your servant
VIVEKANANDA

II*

*To Shri Pramadadas Mitra*

BARANAGORE
*22nd February 1889*

DEAR SIR

I had intended to go to Varanasi and I planned to reach there after visiting the birthplace of my Master But unluckily on the way to that village I had an attack of high fever followed by vomiting and purging as in cholera There was again fever after three or four days

* An asterisk after the numbe of a letter indicate that it is a t anslation from B ng li

—and as the body is now so weak that I can barely walk even two steps I have been compelled now to give up my previous intention I do not know what is God s will but my body is quite unfit for treading on this path Anyway the body is not everything Recovering my health after a few days here I entertain the hope of visiting you there The will of Vishweshwara the Lord of the Universe will prevail—whatever that may be You also kindly bless me My respects to you and brother Jnânânanda

Your servant
VIVEKANANDA

III*

*To Shri Pramadadas Mitra*

BAGHBAZAR
CALCUTTA
*21st March 1889*

RESPECTED SIR

It is several days since I received your last letter Please excuse the delay in replying which was due to some special reasons I am very ill at present there is fever now and then but there is no disorder in the spleen or other organs I am under homoeopathic treatment Now I have had to give up completely the intention of going to Varanasi Whatever God dispenses will happen later on according to the state of the body If you meet brother Jnanananda please tell him not to be held up there in expectation of my coming My going

there is very uncertain My regards to you and Jnanananda

Yours sincerely
VIVEKANANDA

IV*

*To Shri Pramadadas Mitra*

SIMLA
CALCUTTA
*14th July 1889*

RESPECTED SIR

I was very glad to get your letter In such circum stances many give the advice to incline towards the worldly life But you are truthful and have an adaman tine heart I have been highly comforted by your encouraging and cheering words My difficulties here have almost come to a close—only I have engaged the services of a broker for the sale of a piece of land and I hope the sale will be over soon In that case I shall be free from all worry and shall at once go straight off to you at Varanasi

Your servant
VIVEKANANDA

V*

*To Shri Pramadadas Mitra*

BAGHBAZAR
CALCUTTA
*4th June 1890*

DEAR SIR

I got your letter There is no doubt that your advice is very wise It is quite true that the Lord s Will

will prevail We also are spreading out here and there in small groups of two or three I also got two letters from brother Gangadhar He is at present in the house of Gagan Babu suffering from an attack of influenza Gagan Babu is taking special care of him He will come here as soon as he recovers Our respectful salutations to you

Your servant
VIVEKANANDA

PS Abhedananda and others are all doing well

V

## VI

*To Shri Haridas Viharidas Desai*

BARODA
*26th April 1892*

DEAR DIWANJI SAHEB

Very happy to receive your kind letter even here I had not the least difficulty in reaching your house from the station of Nadiad And your brothers they are what they should be your brothers May the Lord shower his choicest blessings on your family I have never found such a glorious one in all my travels Your friend Mr Manibhai has provided every comfort for me but as to his company I have only seen him twice once for a minute the other for ten minutes at the most when he talked about the system of education here Of course I have seen the Library and the pictures of Ravi Varma and that is about all worth seeing here So I am going off this evening to Bombay My thanks to the Diwanji

here (or to you) for his kind behaviour More from Bombay

Yours in affection
VIVEKANANDA

PS At Nadiad I met Mr Manilal Nabhubhai He is a very learned and pious gentleman and I enjoyed his company much

## VII

*To Shri Haridas Viharidas Desai*

POONA
*15th June 1892*

DEAR DIWANJI SAHEB

It is a long time since I heard from you I hope I have not offended you anyway I came down with the Thakore Saheb of Mahabaleshwar and I am living here with him I would remain here a week or more and then proceed to Rameswaram via Hyderabad

Perhaps by this time every hitch has been removed from your way in Junagad at least I hope so I am very anxious to learn about your health especially that sprain you know

*I saw your friend the Surti tutor to the Prince of* Bhavnagar He is a perfect gentleman It was quite a privilege to make his acquaintance he is so good and noble natured a man

My sincerest greetings to your noble minded brothers *and to our friends there* Kindly *send to Mr Nabhubhai* my earnest good wishes in your letter home I hope you would gratify me by a speedy reply

With my sincerest respects and gratitude and pravers for you and yours I remain

Yours faithfully
VIVEKANANDA

## VIII

*To Shri Haridas Viharidas Desai*

BOMBAY

DEAR DIWANJI SAHEB

The bearer of this letter Babu Akshaya Kumar Ghose is a particular friend of mine He comes of a respectable family of Calcutta I found him at Khandwa where I made his acquaintance although I knew his family long before in Calcutta

He is a very honest and intelligent boy and is an undergraduate of the Calcutta University You know how hard the struggle is in Bengal nowadays and the poor boy has been out in search of some job Knowing your native kindness of heart I think I am not disturbing you by asking and entreating you to do something for this young man I need not write more You will find him an honest and hard working lad If a single act of kind ness done to a fellow creature renders his whole life happy I need not remind you that this boy is a Pâtra (a person quite deserving of help) noble and kind as you are

I hope you are not disturbed and troubled by this request of mine This is the first and the last of its kind and made only under very peculiar circumstances Hoping and relying on your kind nature I remain

Yours faithfully
VIVEKANANDA

## IX

*To Shri Haridas Viharidas Desai*

BOMBAY
*22nd August 1892*

DEAR DIWANJI SAHEB

I am very much gratified on receiving your letter *especially as that is the proof that you have the same* kindness towards me

I am very glad that your joint has now been nearly perfectly cured Kindly tell your noble brother to excuse my promise breaking as I have got here some Sanskrit books and help too to read which I do not hope to get elsewhere and am anxious to finish them Yesterday I saw your friend Mr Manahsukharam who has lodged a Sannyâsin friend with him He is very kind to me and so is his son

After remaining here for 15 to 20 days I would pro ceed toward Rameswaram and on my return would surely come to you

The world really is enriched by men high souled noble minded and kind like you the rest are only as axes which cut at the tree of youth of their mothers as the Sanskrit poet puts it

It is impossible that I should ever forget your fatherly kindness and care of me and what else can a poor fakir like me do in return to a mighty minister but pray that the Giver of all gifts may give you all that is desirable on earth and in the end—which may He postpone to a day long long ahead—may take you in His shelter of bliss and happiness and purity infinite

Yours
V

PS One thing that I am very sorry to notice in these parts is the thorough want of Sanskrit and other learning The people of this part of the country have for their religion a certain bundle of local superstitions about eating drinking and bathing and that is about the whole of their religion

Poor fellows! Whatever the rascally and wily priests teach them— all sorts of mummery and tomfoolery as the very gist of the Vedas and Hinduism (mind you neither these rascals of priests nor their forefathers have so much as *seen* a volume of the Vedas for the last 400 generations)—they follow and degrade themselves Lord help them from the Râkshasas in the shape of the Brahmins of the Kaliyuga

I have sent a Bengali boy to you Hope he would be treated kindly

## X

*To Shri Alasinga Perumal*

HYDERABAD
*21st February 1893*

DEAR ALASINGA

Your friend the young graduate came to receive me at the station so also a Bengali gentleman At present I am living with the Bengali gentleman tomorrow I go to live with your young friend for a few days and then I see the different sights here and in a few days you may expect me at Madras For I am very sorry to tell you that I cannot go back at present to Rajputana It is so very dreadfully hot here already I do not know how hot it would be at Rajputana and I cannot bear heat at all So the next thing I would do would be to go back to Bangalore and then to Ootacamund to pass the summer there My brain boils in heat

So all my plans have been dashed to the ground That is why I wanted to hurry off from Madras early In that case I would have months left in my hands to seek out for somebody amongst our northern princes to send me over to America But alas it is now too late First I cannot wander about in this heat—I would die Secondly my fast friends in Rajputana would keep me bound down to their sides if they get hold of me and would not let me go over to Europe So my plan was *to get hold of some new person without my friends* knowledge But this delay at Madras has dashed all my hopes to the ground and with a deep sigh I give it up and the Lord s will be done! However you may be almost sure that I shall see you in a few days for a day or two in Madras and then go to Bangalore and thence to Ootacamund to see if the M— Maharaja sends me up If —because you see I cannot be sure of any promise of a D— Raja They are not Rajputs A Rajput would rather die than break his promise How ever man learns as he lives and experience is the greatest teacher in the world

Thy will be done on earth as it is in heaven for Thine is the glory and the kingdom for ever and ever My compliments to you all

Yours etc
SACCHIDANANDA [1]

## XI

*To Shri Haridas Viharidas Desai*

KHETRI
*28th April 1893*

DEAR DIWANJI SAHEB

On my way here I wanted to go to your place at

[1] Swamiji u d to call h m elf uch in tho e day

Nadiad and redeem my pledge but certain circumstances prevented me and the greatest of them was that you were not there and to play Hamlet leaving Hamlet's part out is a ridiculous affair and as I know for certain that you are to return in a few days to Nadiad and as I am shortly going back to Bombay say in 20 days I thought it better to postpone my visit for that time

Here the Khetri Rajaji was very very anxious to see me and had sent his Private Secretary to Madras and so I was bound to leave for Khetri But the heat is quite intolerable and so I am flying off very soon

By the by I have made the acquaintances of nearly all the Dakshini Rajas and have seen most queer sights in many places of which I would tell you *in extenso* when we meet next I know your love for me and am sure that you would excuse my not going down to your place However I am coming to you in a few days

One thing more Have you got lion's cubs now in Junagad? Can you lend me one for my Raja? He can give you some Rajputana animals in exchange if you like

I saw Ratilalbhai in the train He is the same nice and kind gentleman and what more shall I wish for you my dear Diwanji Saheb but that the Lord would be your all in all in your well merited well applauded and universally respected latter end of a life which was ever holy good and devoted to the service of so many of the sons and daughters of the great Father of Mercies Amen!

Yours affectionately
VIVEKANANDA

## XII

*To Shri Haridas Viharidas Desai*

BOMBAY
*22nd May 1893*

DEAR DIWANJI SAHEB

Reached Bombay a few days ago and would start off in a few days Your friend the Banya gentleman to whom you wrote for the house accommodation writes to say that his house is already full of guests and some of them are ill and that he is very sorry he cannot accommodate me After all we have got a nice airy place

The Private Secretary of H H of Khetri and I are now residing together I cannot express my gratitude to him for his love and kindness to me He is what they call a Tazimi Sardar in Rajputana i e one of those whom the Rajas receive by rising from their seats Still he is so simple and sometimes his service for me makes me almost ashamed

Often and often we see that the very best of men even are troubled and visited with tribulations in this world it may be inexplicable but it is also the experience of my life that the heart and core of every thing here is good that whatever may be the surface waves deep down and underlying everything there is an infinite basis of goodness and love and so long as we do not reach that basis we are troubled but having once reached that zone of calmness let winds howl and tempests rage The house which is built on a rock of ages cannot shake I thoroughly believe that a good unselfish and holy man like you whose whole life has been devoted to doing good to others has already reached this basis of firmness which the Lord Himself has styled as rest upon Brahman in the Gita

May the blows you have received draw you closer to that Being who is the only one to be loved here and hereafter so that you may realise Him in everything past present and future and find everything present or lost in Him and Him alone Amen!

Yours affectionately
VIVEKANANDA

## XIII

*To Shri Haridas Viharidas Desai*

KHETRI
*May 1893*

DEAR DIWANJI SAHEB

Surely my letter had not reached you before you wrote to me The perusal of your letter gave me both pleasure and pain simultaneously pleasure to see that I have the good fortune to be loved by a man of your heart power and position and pain to see that my motive has been misinterpreted throughout Believe me that I love you and respect you like a father and that my gratitude towards you and your family is surely unbounded The fact is this You may remember that I had from before a desire to go to Chicago When at Madras the people there of their own accord in conjunction with H H of Mysore and Ramnad made every arrangement to send me up And you may also remember that between H H of Khetri and myself there are the closest ties of love Well I as a matter of course wrote to him that I was going to America Now the Raja of Khetri thought in his love that I was bound to see him once before I departed especially as the Lord has given him an heir to the throne and great rejoicings were going on here and to make sure of my coming he sent

his Private Secretary all the way to Madras to fetch me and of course I was bound to come In the meanwhile I telegraphed to your brother at Nadiad to know whether you were there and unfortunately the answer I could not get therefore the Secretary who poor fellow had suffered terribly for his master in going to and fro Madras and with his eye wholly on the fact that his master would be unhappy if we could not reach Khetri within the Jalsa (festival) bought tickets at once for Jaipur On our way we met Mr Ratilal who informed me that my wire was received and duly answered and that Mr Viharidas was expecting me Now it is for you to judge whose duty it has been so long to deal even justice What would or could I do in this connection? If I would have got down I could not have reached in time for the Khetri rejoicings on the other hand my motives might be misinterpreted But I know you and your brother s love for me and I knew also that I would have to go back to Bombay in a few days on my way to Chicago I thought that the best solution was to postpone my visit till my return As for my feeling affronted at not being attended by your brothers it is a new discovery of yours which I never even dreamt of or God knows perhaps you have become a thought reader Jokes apart my dear Diwanji Saheb I am the same frolicsome mischievous but I assure you innocent boy you found me at Junagad and my love for your noble self is the same or increased a hundredfold because I have had a mental comparison between yourself and the Diwans of nearly all the states in Dakshin and the Lord be my witness how my tongue was fluent in your praise (although I know that my powers are quite inadequate to estimate your noble qualities) in every Southern court If this be not a sufficient explanation I implore you to pardon me as a father pardons a son and let me not be haunted

with the impression that I was ever ungrateful to one who was so good to me

Yours
VIVEKANANDA

PS I depend on you to remove any misconception in the mind of your brother about my not getting down and that even had I been the very devil I could not forget their kindness and good offices for me

As to the other two Swamis they were my Guru bhais who went to you last at Junagad of them one is our leader I met them after three years and we came together as far as Abu and then I left them If we wish I can take them back to Nadiad on my way to Bombay May the Lord shower His blessings on you and yours

Yours
V

## XIV*

*To Shri Haripada Mitra*

MARGAON
*1893*

DEAR HARIPADA

I just now received a letter from you I reached here safe I went to visit Panjim and a few other villages and temples near by I returned just today I have not given up the intention of visiting Gokarna Mahabaleshwar and other places I start for Dharwar by the morning train tomorrow I have taken the walking stick with me Doctor Yagdekar s friend was very hospitable to me Please give my compliments to Mr Bhate and all others there May the Lord shower His blessings on you and your wife The town of Panjim is very neat and clean

Most of the Christians here are literate The Hindus are mostly uneducated

Yours affectionately
SACCHIDANANDA

## XV

*To Shri Haridas Viharidas Desai*

CHICAGO
*29th January 1894*

DEAR DIWANJI SAHEB

Your last letter reached me a few days ago You had been to see my poor mother and brothers I am glad you did But you have touched the only soft place in my heart You ought to know Diwanji that I am no hard hearted brute If there is any being I love in the whole world it is my mother Yet I believed and still believe that without my giving up the world the great mission which Ramakrishna Paramahamsa my great Master came to preach would not see the light and where would those young men be who have stood as bulwarks against the surging waves of materialism and luxury of the day? These have done a great amount of good to India especially to Bengal and this is only the beginning With the Lord s help they will do things for which the whole world will bless them for ages So on the one hand my vision of the future of Indian religion and that of the whole world my love for the millions of beings sinking down and down for ages with nobody to help them nay nobody with even a thought for them on the other hand making those who are nearest and dearest to me miserable I choose the former Lord will do the rest He is with me I am sure of that if of any thing So long as I am sincere nothing can resist me

because He will be my help Many and many in India could not understand me and how could they poor men? Their thoughts never strayed beyond the everyday routine business of eating and drinking I know only a few noble souls like yourself appreciate me Lord bless your noble self But appreciation or no appreciation I am born to organise these young men nay hundreds more in every city are ready to join me and I want to send them rolling like irresistible waves over India bringing comfort morality religion education to the doors of the meanest and the most downtrodden And this I will do or die

Our people have no idea no appreciation On the other hand that horrible jealousy and suspicious nature which is the natural outcome of a thousand years of slavery make them stand as enemies to every new idea Still the Lord is great

About *the Ârati as well as other things you speak* of it is the form in every one of the monasteries in all parts of India and the worshipping of Guru is the first duty inculcated in the Vedas It has its bad and good sides But you must remember we are a unique company nobody amongst us has a right to force his faith upon the others Many of us do not believe in any form of idolatry but they have no right to object when others do it because that would break the first principle of our religion Again God can only be known in and through man Vibrations of light are everywhere even in the darkest corners but it is only in the lamp that it becomes visible to man Similarly God though everywhere we can only conceive Him as a big man All ideas of God such as merciful preserver helper protector—all these are human ideas anthropomorphic and again these must cling to a man call him a Guru or a Prophet or an Incarnation Man cannot go beyond his nature no more than you can jump out of your body What harm is

there in some people worshipping their Guru when that Guru was a hundred times more holy than even your historical prophets all taken together? If there is no harm in worshipping Christ Krishna or Buddha why should there be any in worshipping this man who never did or thought anything unholy whose intellect only through intuition stands head and shoulders above all the other prophets because they were all one sided? It was he that brought first to the world this idea of truth not *in* but *of* every religion which is gaining ground all over the world and that without the help of science or philosophy or any other acquirement

But even this is not compulsory none of the brethren has told you that all must worship his Guru No no no But again none of us has a right to object when another worships Why? Because that would overthrow this most unique society the world has ever seen ten men of ten different notions and ideas living in perfect harmony Wait Diwanji the Lord is great and merciful you will see more

We do not only tolerate but accept every religion and with the Lord s help I am trying to preach it to the whole world

Three things are necessary to make every man great every nation great

1 Conviction of the powers of goodness
2 Absence of jealousy and suspicion
3 Helping all who are trying to be and do good

Why should the Hindu nation with all its wonderful intelligence and other things have gone to pieces? I would answer you *Jealousy* Never were there people more wretchedly jealous of one another more envious of one another s fame and name than this wretched Hindu race And if you ever come out in the West the absence of this is the first feeling which you will see in the Western nations

Three men cannot act in concert together in India for five minutes Each one struggles for power and in the long run the whole organisation comes to grief Lord! Lord! When will we learn not to be jealous! In such a nation and especially in Bengal to create a band of men who are tied and bound together with a most un dying love in spite of difference is it not wonderful? This band will increase This idea of wonderful liberality joined with eternal energy and progress must spread over India It must electrify the whole nation and must enter the very pores of society in spite of the horrible ignorance spite caste feeling old boobyism and jealousy which are the heritage of this nation of slaves

You are one of the few noble natures who stand as rocks out of water in this sea of universal stagnation Lord bless you for ever and ever!

Yours ever faithfully
VIVEKANANDA

## XVI

*To the Hale Sisters*

DETROIT
*12th March 1894*

DEAR SISTERS

I am now living with Mr Palmer He is a very nice gentleman He gave a dinner the night before last to a group of his old friends each more than 60 years of age which he calls his old boys club I spoke at an opera house for two hours and a half People were very much pleased I am going to Boston and New York I will get here sufficient to cover my expenses there I have forgotten the addresses of both Flagg and Prof Wright I am not going to lecture in Michigan Mr Holden tried

to persuade me this morning to lecture in Michigan but I am quite bent upon seeing a little of Boston and New York To tell you the truth the more I am getting popularity and facility in speaking the more I am getting fed up My last address was the best I ever delivered Mr Palmer was in ecstasies and the audience remained almost spellbound so much so that it was after the lecture that I found I had spoken so long A speaker always feels the uneasiness or inattention of the audience Lord save me from such nonsense I am fed up I would take rest in Boston or New York if the Lord permits My love to you all May you ever be happy!

Your affectionate brother
VIVEKANANDA

## XVII

*To the Hale Sisters*

DETROIT
*15th March 1894*

DEAR BABIES

I am pulling on well with old Palmer He is a very jolly good old man I got only 127 dollars by my last lecture I am going to speak again in Detroit on Monday Your mother asked me to write to a lady in Lynn I have never seen her Is it etiquette to write without any introduction? Please post me a little better on this lady Where is Lynn? The funniest thing said about me here was in one of the papers which said The cyclonic Hindu has come and is a guest with Mr Palmer Mr Palmer has become a Hindu and is going to India only he insists that two reforms should be carried out firstly that the Car of Jagannath should be drawn by

Percherons raised in Mr Palmer s Loghouse Farm and secondly that the Jersey cow be admitted into the pantheon of Hindu sacred cows Mr Palmer is passionately fond of both Percheron horse and Jersey cow and has a great stock of both in his Loghouse Farm

The first lecture was not properly managed the cost of the hall being 150 dollars I have given up Holden *Here is another fellow cropped up let me see if he does* better Mr Palmer makes me laugh the whole day Tomorrow there is going to be another dinner party So far all is well but I do not know—I have become very sad in my heart since I am here—do not know why

I am wearied of lecturing and all that nonsense This mixing with hundreds of varieties of the human animal has disturbed me I will tell you what is to my taste I cannot write and I cannot speak but I can think deeply and when I am heated can speak fire It should be *however to a select a very select—few Let them* if they will carry and scatter my ideas broadcast—not I This is only a just division of labour The same man never succeeded both in thinking and in scattering his thoughts A man should be free to think especially spiritual thoughts

Just because this assertion of independence this proving that man is *not a machine* is the essence of all religious thought it is impossible to think it in the routine mechanical way It is this tendency to bring everything down to the level of a machine that has given the West its wonderful prosperity And it is this which has driven away all religion from its doors Even the little that is left the West has reduced to a systematic drill

I am really not cyclonic at all Far from it What I want is not here nor can I longer bear this cyclonic atmosphere This is the way to perfection to strive to be perfect and to strive to make perfect a few men and

women My idea of doing good is this to evolve out a few giants and not to strew pearls before swine and so lose time health and energy

Just now I got a letter from Flagg He cannot help me in lecturing He says First go to Boston Well I do not care for lecturing any more It is too disgusting this attempt to bring me to suit anybody s or any audience s fads However I shall come back to Chicago for a day or two at least before I go out of this country Lord bless you all

Ever gratefully your brother
VIVEKANANDA

## XVIII

*To Miss Mary Hale*

DETROIT
*18th March 1894*

DEAR SISTER MARY

My heartfelt thanks for your kindly sending me the letter from Calcutta It was from my brethren at Calcutta and it is written on the occasion of a private invitation to celebrate the birthday of my Master about whom you have heard so much from me—so I send it over to you The letter says that M—has gone back to Calcutta and is preaching that Vivekananda is committing every sin under the sun in America This is your America s *wonderful spiritual man*! It is not their fault until one is really spiritual that is until one has got a real insight into the nature of one s own soul and has got a glimpse of the world of the soul one cannot distinguish chaff from seed tall talk from depth and so on I am sorry for poor M—that he should stoop so low! Lord bless the old boy!

The address inside the letter is in English and is my old old name as written by a companion of my child hood who has also taken orders It is a very poetic name That written in the letter is an abbreviation the full name being Narendra meaning the Chief of men ( nara means man and indra stands for ruler chief )—very ludicrous isn t it? But such are the names in our country we cannot help but I am glad I have given that up

I am all right Hoping it is the same with you

I remain your brother
VIVEKANANDA

## XIX

*To Miss Mary Hale*

DETROIT
*30th March 1894*

DEAR SISTER

Your and Mother Church s letters came together just now acknowledging the receipt of the money I am very glad to receive the Khetri letter which I send back for your perusal You would find from it that he wants some newspaper clippings I do not think I have any except the Detroit ones which I will send to him If you can get hold of some others kindly send some over to him if it be possible and convenient You know his address—H H the Maharajah of Khetri Rajputana India Of course this letter is for the perusal of the holy family alone Mrs Breed wrote to me a stiff burning letter first and then today I got a telegram from her inviting me to be her guest for a week Before this I got a letter from Mrs Smith of New York writing on her behalf and another lady Miss Helen Gould and another Dr —to come over to New York As the Lynn Club

wants me on the 17th of next month I am going to New York first and come in time for their meeting at Lynn

Next summer if I do not go away which Mrs Bagley insists I should not I may go to Annisquam where Mrs Bagley has engaged a nice house Mrs Bagley is a very spiritual lady and Mr Palmer a spirituous gentleman but very good What shall I write more? I am all right in nice health of body and mind May you all be blessed ever blessed my dear dear sisters By the by Mrs Sherman has presented me with a lot of things amongst which is a nail set and letter holder and a little satchel etc etc Although I objected especially to the nail set as very dudish with mother of pearl handles she insisted and *I had to take them* *although I do not know what to* do with that brushing instrument Lord bless them all She gave me one advice—never to wear this Afrikee dress in society Now I am a society man! Lord! What comes next? Long life brings queer experiences! My inexpressible love for you all my holy family

Your brother
VIVEKANANDA

## XX

*To Shri Haridas Viharidas Desai*

CHICAGO
*20th June 1894*

DEAR DIWANJI SAHEB

Your very kind note came today I am so sorry that I could have caused pain to such a noble heart as yours with my rash and strong words I bow down to your mild corrections Thy son am I teach me thus bowing — Gita But you well know Diwanji Saheb it was my love

that prompted me to say so The backbiters I must tell you have not indirectly benefited me on the other hand they have injured me immensely in view of the fact that our Hindu people did not move a finger to tell the Americans that I represented them Had our people sent some words thanking the American people for their kindness to me and stating that I was representing them I —have been telling the American people that I have donned the Sannyasin s garb only in America and that I was a cheat bare and simple So far as reception goes it has no effect on the American nation but so far as helping me with funds goes it has a terrible effect in making them take off their helping hands from me And it is one year since I have been here and not one man of note from India has thought it fit to make the Americans know that I am no *cheat* There again the missionaries are always seeking for something against me and they are busy picking up anything said against me by the Christian papers of India and publishing it here Now you must know that the people here know very little of the distinction in India between the Christian and the Hindu

Primarily my coming has been to raise funds for an enterprise of my own Let me tell it all to you again

The whole difference between the West and the East is in this They are nations we are not i e civilisation education here is general it penetrates into the masses The higher classes in India and America are the same but the distance is infinite between the lower classes of the two countries Why was it so easy for the English to conquer India? It was because they are a nation we are not When one of our great men dies we must sit for centuries to have another they can produce them as *fast* as they die When our Diwanji Saheb will pass away (which the Lord may delay long for the good of my country) the nation will see the difficulty at once of filling his place which is seen even now in the fact that they

cannot dispense with your services It is the dearth of great ones Why so? Because they have such a bigger field of recruiting their great ones we have so small A nation of 300 millions has the smallest field of recruiting its great ones compared with nations of thirty forty or sixty millions because the number of educated men and women in those nations is so great Now do not mistake me my kind friend this is the great defect in our nation and must be removed

Educate and raise the masses and thus alone a nation is possible Our reformers do not see where the wound is they want to save the nation by marrying the widows do you think that a nation is saved by the number of husbands its widows get? Nor is our religion to blame for an idol more or less makes no difference The whole defect is here The real nation who live in cottages have forgotten their manhood their individuality Trodden under the foot of the Hindu Mussalman or Christian they have come to think that they are born to be trodden under the foot of everybody who has money enough in his pocket They are to be given back their lost individuality They are to be educated Whether idols will remain or not whether widows will have husbands enough or not whether caste is good or bad I do not bother myself with such questions Everyone must work out his own salvation Our duty is to put the chemicals together the crystallisation will come through God s laws Let us put ideas into their heads and they will do the rest Now this means educating the masses Here are these difficulties A pauper government cannot will not do anything so no help from that quarter

Even supposing we are in a position to open schools in each village free still the poor boys would rather go to the plough to earn their living than come to your school Neither have we the money nor can we make them come to education The problem seems hopeless

I have found a way out It is this If the mountain does not come to Mohammed Mohammed must go to the mountain If the poor cannot come to education education must reach them at the plough in the factory everywhere How? You have seen my brethren Now I can get hundreds of such all over India unselfish good and educated Let these men go from village to village bringing not only religion to the door of everyone but also education So I have a nucleus of organising the widows also as instructors to our women

Now suppose the villagers after their day s work have come to their village and sitting under a tree or somewhere are smoking and talking the time away Suppose two of these educated Sannyasins get hold of them there and with a camera throw astronomical or other pictures scenes from different nations histories etc Thus with globes maps etc —and all this orally—how much can be done that way Diwanji? It is not that the eye is the only door of knowledge the ear can do all the same So they would have ideas and morality and hope for better Here our work ends Let them do the rest What would make the Sannyasins do this sacrifice undertake such a task?—religious enthusiasm Every new religious wave requires a new centre The old religion can only be revivified by a new centre Hang your dogmas or doctrines they never pay It is a character a life a centre a God man that must lead the way that must be the centre round which all other elements will gather themselves and then fall like a tidal wave upon the society carrying all before it washing away all impurities Again a piece of wood can only easily be cut along the grain So the old Hinduism can only be reformed through Hinduism and not through the new fangled reform movements At the same time the reformers must be able to unite in themselves the culture of both the East and the West Now do you not think that you have already

seen the nucleus of such a great movement that you have heard the low rumblings of the coming tidal wave? That centre that God man to lead was born in India He was the great Ramakrishna Paramahamsa and round him this band is slowly gathering They will do the work Now Diwanji Maharaj this requires an organisation money—a little at least to set the wheel in motion Who would have given us money in India?—So Diwanji Maharaj I crossed over to America You may remember I begged all the money from the poor and the offers of the rich I would not accept because they could not understand my ideas Now lecturing for a year in this country I could not succeed at all (of course I have no wants for myself) in my plan for raising some funds for setting up my work First this year is a very bad year in America thousands of their poor are without work Secondly the missionaries and the —try to thwart all my views Thirdly a year has rolled by and our countrymen could not even do so much for me as to say to the American people that I was a real Sannyasin and no cheat and that I represented the Hindu religion Even this much the expenditure of a few words they could not do! Bravo my countrymen! I love them Diwanji Saheb Human help I spurn with my foot He who has been with me through hills and dales through deserts or forests will be with me I hope if not some heroic soul would arise sometime or other in India far abler than myself and carry it out So I have told you all about it Diwanji excuse my long letter my noble friend one of the few who really feel for me have real kindness for me You are at liberty my friend to think that I am a dreamer a visionary but believe at least that I am sincere to the backbone and my greatest fault is that I love my country only too too well May you and yours be blessed ever and ever my noble noble friend May the shadow of the Almighty ever rest on all those you love I offer my

eternal gratitude to you My debt to you is immense not only because you are my friend but also because you have all your life served the Lord and your motherland so well

Ever yours in gratitude
VIVEKANANDA

## XXI

*To a Madrasi disciple*

541 DEARBORN AVE
CHICAGO
*28th June 1894*

DEAR—

The other day I received a letter from G G Mysore G G unfortunately thinks that I am all knowing else he would have writtten his Canarese address on the top of the letter more legibly Then again it is a great mistake to address me letters to any other place but Chicago It was my mistake of course at first because I ought to have thought of the fine Buddhi (intellect) of our friends who are throwing letters at me anywhere they find an address at the top But tell our Madras Brihas patis (i e wise fellows) that they already knew full well that before their letters reach I may be 1000 miles away from that particular place for I am continuously travelling In Chicago there is a friend whose house is my head quarters

Now as to my prospects here—it is wellnigh zero Why because although I had the best purpose it has been made null and void by these causes All that I get about India is from Madras letters Your letters say again and again how I am being praised in India But that is

between you and me for I never saw a single Indian paper writing about me except the three square inches sent to me by Alasinga On the other hand everything that is said by Christians in India is sedulously gathered by the missionaries and regularly published and they go from door to door to make my friends give me up They have succeeded only too well for there is not one word for me from India Indian Hindu papers may laud me to the skies but not a word of that ever came to America so that many people in this country think me a fraud In the face of the missionaries and with the jealousy of the Hindus here to back them I have not a word to say I now think it was foolish of me to go to the Parliament on the strength of the urging of the Madras boys They are boys after all Of course I am eternally obliged to them but they are after all enthusiastic young men without any executive abilities I came here without credentials How else to show that I am not a fraud in the face of the missionaries and the B— S—? Now I thought nothing so easy as to spend a few words I thought nothing would be so easy as to hold a meeting of some respectable persons in Madras and Calcutta and pass a resolution thanking me and the American people for being kind to me and sending it over officially i e through the Secretary of the function to America for instance sending one to Dr Barrows and asking him to publish it in the papers and so on to different papers of Boston New York and Chicago Now after all I found that it is too terrible a task for India to undertake There has not been one voice for me in one year and every one against me for whatever you may say of me in your homes who knows anything of it here? More than two months ago I wrote to Alasinga about this He did not even answer my letter I am afraid his heart has grown lukewarm So you must first think of that and then show this letter to the Madras people On the other hand my

brethren foolishly talk nonsense about Keshab Sen and the Madrasis telling the ——anything I write about them are creating only enemies Oh! If only I had one man of some true abilities and brains to back me in India! But His will be done I stand a fraud in this country It was my foolishness to go to the Parliament without any credentials hoping that there would be many for me I have got to work it out slowly

On the whole the Americans are a million times nobler than the Hindus and I can work more good here than in the country of the ingrate and the heartless After all I must work my Karma out So far as pecuniary circumstances go I am all right and will be all right The number of T—s in all America is only 625 by the last census Mixing up with them will smash me in a minute rather than help me in any way What nonsense does Alasinga mean by my going to London to see Mr Old etc Fool! the boys there don t know what they are talking And this pack of Madrasi babies cannot even keep a counsel in their blessed noodles! Talk nonsense all day and when it comes to the least business they are nowhere! Boobies who cannot get up a few meetings of 50 men each and send up a few empty *words* only to help me talk big about influencing the world I have written to you about the phonograph Now there is here an electric fan costing $20 and working beautifully The battery works 100 hours and then can be replenished at any electric plant Good bye I have had enough of the Hindus Now His will be done I obey and bow down to my Karma How ever *do not think me ungrateful* The Madras people have done for me more than I deserved and more than was in their power It was my foolishness—the for getting for a moment that we Hindus have not yet become human beings and giving up for a moment my self reliance and relying upon the Hindus—that I came

to grief Every moment I expected something from India No it never came Last two months especially I was in torture at every moment No not even a news paper from India! My friends waited—waited month after month nothing came not a voice Many conse quently grew cold and at last gave me up But it is the punishment for relying upon man and upon brutes for our countrymen are not men as yet They are ready to be praised but when their turn comes even to say a word they are nowhere

My thanks eternal to the Madras young men May the Lord bless them for ever America is the best field in the world to carry on any idea so I do not think of leaving America soon And why? Here I have food and drink and clothes and everybody so kind and all this for a few good words! Why should I give up such a noble nation to go to the land of brutes and ingrates and the brainless boobies held in eternal thraldom of super stition merciless pitiless wretches? So good bye again You may show this letter to the people with discretion I do not think the Madrasis have shown much discretion even Alasinga upon whom I built so much By the by will you kindly send up a few copies of the sketch of Ramakrishna Paramahamsa s life written by Mazumdar to Chicago? They have lots in Calcutta Don t forget the address 541 Dearborn Avenue (not Street) Chicago or c/o Thomas Cook Chicago Any other address would cause much delay and confusion as I am conti nually travelling and Chicago is my headquarters although even this much did not come to the brains of our Madras friends Kindly give G G Alasinga Secretary and all others my eternal blessings I am always praying for their welfare and I am not in the least displeased with them but I am not pleased with myself I committed a terrible error—of calculating upon others help—once in my life—and I have paid for it It was

my fault and not theirs Lord bless all the Madras people They are at least far superior to the Bengalis who are simply fools and have no souls no stamina at all Good bye good bye I have launched my boat in the waves come what may Regarding my brutal criticisms I have really no right to make them You have done for me infinitely more than I deserve I must bear my own Karma and that without a murmur Lord bless you all

Yours truly
VIVEKANANDA

PS I am afraid Alasinga s college has closed but I had no intimation of it and he never gave me his home address

Kidi has dropped out I am afraid

V

## XXII

*To Mrs George W Hale*

C/o Dr E Guernsey
FISHKILL LANDING N Y
*July 1894*

DEAR MOTHER

I came yesterday to this place and shall remain here a few days I received in New York a letter from you but did not receive any *Interior* for which I am glad because I am not perfect yet and knowing the unselfish love the Presbyterian priests especially the *Interior* has for me I want to keep aloof from rousing bad feelings towards these sweet Christian gentlemen in my heart

Our religion teaches that anger is a great sin even if it is righteous Each must follow his own religion I could not for my soul distinguish ever the distinction between religious anger and commonplace anger religious killing and commonplace killing religious slandering and irreligious and so forth Nor may that fine ethical distinction ever enter into the ethics of our nation! Jesting apart Mother Church I do not care the least for the gambols these men play seeing as I do through and through the insincerity the hypocrisy and love of self and name that is the *only motive power* in these men

As to the photographs the first time the Babies got a few copies and the second time you brought a few copies you know they are to give 50 copies in all Sister Isabelle knows better than I

With my sincerest love and respects for you and Father Pope

I remain
Yours
VIVEKANANDA

PS How are you enjoying the heat? I am bear ing the heat very well here I had an invitation to Swamp scott on the sea from a very rich lady whose acquaintance I made last winter in New York but I declined with thanks I am very careful now to take the hospitality of anybody here especially the rich I had a few other invitations from some very rich people here I refused I have by this time seen the whole business through Lord bless you and yours Mother Church for your sincerity Oh! it is so rare in this world

Yours affectionately
V

## XXIII

*To the Hale Sisters (about the Calcutta meeting of 4th Sept 1894)*

NEW YORK
*9th July (Sept ?) 1894*

O MY SISTERS

Glory unto Jagadambâ (Mother of the Universe)! I have gained beyond expectations The prophet has been honoured and with a *vengeance* I am weeping like a child at His mercy—He never leaves His servant sisters The letter I send you will explain all and the printed things are coming to the American people The names there are the very flower of our country The President was the chief *nobleman* of Calcutta and the other man Mahesh Chandra Nyâyaratna is the principal of the Sanskrit College and the chief Brahmin in all India and recognised by the Government as such The letter will tell you all O sisters! What a rogue am I that in the face of such mercies sometimes the faith totters—seeing every moment that I am in His hands Still the mind sometimes gets despondent Sisters there is a *God*—a Father—a *Mother* who never leaves His children never never never Put uncanny theories aside and becoming children take refuge in Him I cannot write more—I am weeping like a woman

Blessed blessed art Thou Lord God of my soul!

Yours affectionately
VIVEKANANDA

## XXIV

*To the Hale Sisters*

SWAMPSCOTT
*26th July 1894*

DEAR BABIES

Now don t let my letters stray beyond the circle please I had a beautiful letter from sister Mary See

how I am getting the dash sister Jeany teaches me all that She can jump and run and play and swear like a devil and talk slang at the rate of 500 a minute only she does not much care for religion only a little She is gone today home and I am going to Greenacre I had been to see Mrs Breed Mrs Stone was there with whom is residing Mrs Pullman and all the golden bugs my old friends hereabouts They are kind as usual On my way back from Greenacre I am going to Annis quam to see Mrs Bagley for a few days Darn it I forget everything I had duckings in the sea like a fish I am enjoying every bit of it What nonsense was the song Harriet taught me dans la plaine the deuce take it I told it to a French scholar and he laughed and laughed till the fellow was wellnigh burst at my wonder ful translation That is the way you would have taught me French! You are a pack of fools and heathens I tell you Now are you gasping for breath like a huge fish stranded? I am glad that you are sizzling Oh! how nice and cool it is here and it is increased a hundred fold when I think about the gasping sizzling boiling frying four old maids and how cool and nice I am here Whoooooo!

Miss Phillips has a beautiful place somewhere in N Y State—mountain lake river forest altogether—what more? I am going to make a Himalayas there and start a monastery as sure as I am living—I am not going to leave this country without throwing one more apple of discord into this already roaring fighting kicking mad whirlpool of American religion Well dear old maids you sometimes have a glimpse of the lake and on every hot noon think of going down to the bottom of the lake down down down until it is cool and nice and then to lie down on the bottom with that coolness above and around and lie there still silent and just doze—not sleep but dreamy dozing half unconscious sort of bliss—

very much like that which opium brings that is delicious and drinking lots of iced water Lord bless my soul—I had such cramps several times as would have killed an elephant So I hope to keep myself away from the cold water

May you be all happy dear *fin de siecle* young ladies is the constant prayer of VIVEKANANDA

## XXV

*To the Hale Sisters*

GREENACRE
*11th August 1894*

DEAR SISTERS

I have been all this time in Greenacre I enjoyed this place very much They have been all very kind to me One Chicago lady Mrs Pratt of Kenilworth wanted to give me $500 she became so much interested in me but I refused She has made me promise that I would send word to her whenever I need money which I hope the Lord will never put me in His help alone is sufficient for me I have not heard anything from you nor from Mother Neither have I any news from India as to the arrival of the phonograph

If there was anything in my letter to you which was offensive I hope you all know that I meant everything in love It is useless to express my gratitude to you for your kindness Lord bless you and shower His choicest blessings on you and those you love To your family I am ever ever beholden You know it You feel it I cannot express it On Sunday I am going to lecture at Plymouth at the Sympathy of Religions meetings of Col Higginson Herewith I send a photograph Cora Stockham took of the group under the tree *It is only* a proof and will fade away under exposure but I cannot

get anything better at present Kindly tender my heart felt love and gratitude to Miss Howe She has been so so kind to me I do not need anything at present I shall be very glad to let you know if I need anything I think I am going to Fishkill from Plymouth where I will be only a couple of days I will write you again from Fishkill Hope you are all happy or rather I know you are Pure and good souls can never be unhappy I shall have a very nice time the few weeks I am here I will be in New York next fall New York is a grand and good place The New York people have a tenacity of purpose unknown in any other city I had a letter from Mrs Potter Palmer asking me to see her in August She is a very gracious and kind lady etc I have not much to say There is my friend Dr Janes of New York President of the Ethical Culture Society who has begun his lectures I must go to hear him He and I agree so much May you be always happy!

Ever your well wishing brother
VIVEKANANDA

## XXVI

*To Miss Mary Hale*

C/o MRS BAGLEY
ANNISQUAM
*31st August 1894*

DEAR SISTER

The letter from the Madras people was published in yesterday s *Boston Transcript* I hope to send you a copy You may have seen it in some Chicago paper I am sure there is some mail for me at Cook & Sons—I shall be here till Tuesday next at least on which day I am going to lecture here in Annisquam

Kindly inquire at Cook s for my mail and send it over at Annisquam

I had no news of you for some time I sent two pictures to Mother Church yesterday and hope you will like them I am very anxious about the India mail With love for all I am your ever affectionate brother

VIVEKANANDA

PS As I do not know where you are I could not send something else which I have to send over to you

V

## XXVII

*To Mr Leon Landsberg*

HOTEL BELLEVUE
BOSTON
*13th September 1894*

DEAR LEON

Forgive me but I have the right as your Guru to advise you and I insist that you buy some clothes for yourself *as the want of them stands in the way of your doing anything in this country* Once you have a start you may dress in whatever way you like People do not object

You need not thank me for this is only a duty According to Hindu law if a Guru dies his heir is his disciple and not even his son—supposing him to have had one before becoming a Sannyasin This is you see an actual spiritual relationship and none of your Yankee tutor business!

With all blessing and prayers for your success

Yours
VIVEKANANDA

## XXVIII

*To Miss Mary Hale*

BEACON ST BOSTON
HOTEL BELLEVUE
*13th September 1894*

DEAR SISTER

Your kind note reached me this morning I have been in this hotel for about a week I will remain in Boston some time yet I have plenty of gowns already in fact more than I can carry with ease When I had that drenching in Annisquam I had on that beautiful black suit you appreciate so much and I do not think it can be damaged any way it also has been penetrated with my deep meditations on the Absolute I am very glad that you enjoyed the summer so well As for me I am vagabondising I was very much amused the other day at reading Abe Hue s description of the vagabond lamas of Tibet—a true picture of our fraternity He says they are queer people They come when they will sit at everybody s table invitation or no invitation live where they will and go where they will There is not a mountain they have not climbed not a river they have not crossed not a nation they do not know not a language they do not talk He thinks that God must have put into them a part of that energy which makes the planets go round and round eternally Today this vagabond lama was seized with a desire of going right along scribbling and so I walked down and entering a store bought all sorts of writing material and a beautiful portfolio which shuts with a clasp and has even a little wooden ink stand So far it promises well Hope it will continue Last month I had mail enough from India and am greatly delighted with my countrymen at their generous

tion of my work Good enough for them I cannot find anything more to write Prof Wright his wife and children were as good as ever Words cannot express my gratitude to them

Everything so far is not going bad with me except that I had a bad cold Now I think the fellow is gone This time I tried Christian Science for insomnia and really found it worked very well Wishing you all happiness I remain ever your affectionate brother

VIVEKANANDA

PS Kindly tell Mother that I do not want any coat now

V

## XXIX

*To Miss Mary Hale*

c/o MRS E TOTTEN
1703 1ST STREET
WASHINGTON
[*November 1 (?) 1894*]

DEAR SISTER

I have received two letters which you were very kind to take the trouble to write I am going to talk here today tomorrow at Baltimore then again Monday at Baltimore and Tuesday at Washington again So I will be in Philadelphia a few days after that I shall write to you the day I start from Washington I shall be in Philadelphia a few days only to see Prof Wright and then I go to New York and run for a little while between New York and Boston and then go to Chicago via Detroit and then whist as Senator Palmer says to England

The word Dharma means religion I am very sorry they treated Petro very badly in Calcutta I have been very well treated here and am doing very well Nothing extraordinary in the meantime except I got vexed at

getting loads of newspapers from India so after sending a cart load to Mother Church and another to Mrs Guernsey I had to write them to stop sending their newspapers I have had boom enough in India Alasinga writes that every village all over the country now has heard of me Well the old peace is gone for ever and no rest anywhere from heretofore These newspapers of India will be my death I am sure They will now talk what I ate on such and such a date and how I sneezed Lord bless them it was all *my foolery I really came here to raise a little* money secretly and go over but was caught in the trap and now no more of a reserved life

Wishing you all enjoyments

I remain yours affectionately
VIVEKANANDA

## XXX

*To Shri Haridas Viharidas Desai*

CHICAGO
*September 1894*

DEAR DIWANJI SAHEB

Your kind letter reached long ago but as I had not anything to write I was late in answering

Your kind note to G W Hale has been very gratifying as I owed them that much I have been travelling all over this country all this time and seeing everything I have come to this conclusion that there is only one country in the world which understands religion—it is India that with all their faults the Hindus are head and shoulders above all other nations in morality and spirituality and that with proper care and attempt and struggle of all her disinterested sons by combining some of the active and heroic elements of the West with calm

virtues of the Hindus there will come a type of men far superior to any that have ever been in this world

I do not know when I come back but I have seen enough of this country I think and so soon will go over to Europe and then to India

With my best love gratitude to you and all your brothers

I remain Yours faithfully
VIVEKANANDA

## XXXI

*To Shri Haridas Viharidas Desai*

CHICAGO(?)
*September 1894(3?)*

DEAR DIWANJI SAHEB

Very kind of you to send up a man inquiring about my health and comfort But that s quite of a piece with *your fatherly character I am all right here* Your kind ness has left nothing more to be desired here I hope soon to see you in a few days I don t require any conveyance while going down Descent is very bad and the ascent is the worst part of the job that s the same in everything in the world My heartfelt gratitude to you

Yours faithfully
VIVEKANANDA

## XXXII

*To Mrs George W Hale*

1125 ST PAUL ST
BALTIMORE
*October 1894*

DEAR MOTHER

You see where I am now Did you see a telegram from India in the *Chicago Tribune*? Did they print the

address from Calcutta? From here I go to Washington thence to Philadelphia and then to New York send me the address of Miss Mary in Philadelphia so that I may look in on my way to New York Hope your worry is over

Yours affectionately
VIVEKANANDA

## XXXIII

*To Shri Haridas Viharidas Desai*

CHICAGO
*15th November 1894(3 ?)*

DEAR DIWANJI SAHEB

I here received your kind note So very kind of you to remember me even here I have not seen your Narayan Hemchandra He is not in America I believe I have seen many strange sights and grand things I am glad that there is a good chance of your coming over to Europe Avail yourself of it by any means The fact of our isolation from all the other nations of the world is the cause of our degeneration and its only remedy is getting back into the current of the rest of the world Motion is the sign of life America is a grand country It is a paradise of the poor and women There is almost no poor in the country and nowhere else in the world women are so free so educated so cultured They are everything in society

This is a great lesson The Sannyasin has not lost a bit of his Sannyasiship even his mode of living And in this most hospitable country every home is open to me The Lord who guides me in India would He not guide me here ? And He has

You may not understand why a Sannyasin should be in America but it was necessary Because the only

you have to be recognised by the world is your religion and good specimens of our religious men are required to be sent abroad to give other nations an idea that India is not dead

Some representative men must come out of India and go to all the nations of the earth to show at least that you are not savages You may not feel the necessity of *it from your Indian home but believe me much depends* upon that for your nation And a Sannyasin who has no idea of doing good to his fellows is a brute not a Sannyasin

I am neither a sightseer nor an idle traveller but you will see if you live to see and bless me all your life

Mr Dvivedi s papers were too big for the Parliament and they had to be cut short

I spoke at the Parliament of Religions and with what effect I may quote to you from a few newspapers and magazines ready at hand I need not be self conceited but to you in confidence I am bound to say because of your love that no Hindu made such an impression in America and if my coming has done nothing it has done this that the Americans have come to know that India even today produces men at whose feet even the most civilised nations may learn lessons of religion and morality Don t you think that is enough to say for the Hindu nation sending over here their Sannyasin ? You would hear the details from Virchand Gandhi

These I quote from the journals But eloquent as were many of the brief speeches no one expressed as well the spirit of the Parliament (of religions) and its *limitations as the Hindu monk* I copy his address in full but I can only suggest its effect upon the audience for he is an orator by Divine right and his strong intelligent face in its picturesque setting of yellow and orange was hardly less interesting than these earnest words and

the rich rhythmical utterance he gave them (Here the speech is quoted *in extenso*) *New York Critique*

He has preached in clubs and churches until his faith has become familiar to us His culture his eloquence and his fascinating personality have given us *a new idea of Hindu civilisation* His fine intelligent face and his deep musical voice prepossessing one at once in his favour He speaks without notes presenting his facts and his conclusions with the greatest art and the most convincing sincerity and rising often to rich inspiring eloquence *Ibid*

Vivekananda is undoubtedly the greatest figure in the Parliament of Religions After hearing him we feel how foolish it is to send missionaries to this learned nation *Herald (the greatest paper here)*

I cease from quoting more lest you think me con ceited but this was necessary to you who have become nearly frogs in the well and would not see how the world is going on elsewhere I do not mean you personally my noble friend but our nation in general

I am the same here as in India only here in this highly cultural land there is an appreciation a sympathy which our ignorant fools never dream of There our people *grudge us monks a crumb of bread here they are ready* to pay one thousand rupees a lecture and remain grateful for the instructions for ever

I am appreciated by these strangers more than I was ever in India I can if I will live here all my life in the greatest luxury but I am a Sannyasin and India with all thy faults I love thee still So I am coming back after some months and go on sowing the seeds of religion and progress from city to city as I was doing so long although amongst a people who know not what apprecia tion and gratefulness are

I am ashamed of my own nation when I compare their

beggarly selfish unappreciative ignorant ungratefulness with the help hospitality sympathy and respect which the Americans have shown to me a representative of a foreign religion Therefore come out of the country see others and compare

Now after these quotations do you think it was worth while to send a Sannyasin to America?

Please do not publish it I hate notoriety in the same manner as I did in India

I am doing the Lord s work and wherever He leads I follow मूकं करोति वाचालं etc —He who makes the dumb eloquent and the lame cross a mountain He will help me I do not care for human help He is ready to help me in India in America on the North Pole if He thinks fit If He does not none else can help me Glory unto the Lord for ever and ever

Yours with blessings
VIVEKANANDA

## XXXIV

*To Shri Haridas Viharidas Desai*

541 DEARBORN AVENUE
CHICAGO
*November (?) 1894*

DEAR DIWANJI

Your letter pleased me extremely I of course understand the joke but I am not the baby to be put off with a joke now take more

The secret of success of the Westerners is the power of organisation and combination That is only possible with mutual trust and co operation and help Now here is Virchand Gandhi the Jain whom you well knew in Bombay This man never takes anything but pure vegetables even in this terribly cold climate and

tooth and nail tries to defend his countrymen and religion The people of this country like him very well but what are they doing who sent him over ? They are trying to outcast him Jealousy is a vice necessarily generated in slaves Again it is jealousy that holds them down

Here were they were all trying to lecture and get money thereby They did something but I succeeded better than they—why I did not put myself as a bar to their success It was the will of the Lord But all these except have fabricated and circulated the most horrible lies about me in this country and behind my back Americans will never stoop to such meanness

If any man tries to move forward here every body is ready to help him In India you may try tomorrow by writing a single line of praise for me in any of our papers (Hindu) and next day they would be all against me Why ? It is the nature of slaves They cannot suffer to see any one of their brethren putting his head the least above their rank Do you mean to compare such stuff with these children of liberty self help and brotherly love ? The nearest approach to our people are the freed slaves of the U S A the Negroes Why in the South they are about twenty millions and are now free The whites are a handful still the whites hold them down all the same Why ? Even when they have every right by law a bloody war between the brothers has been fought to free these slaves The same defect—jealousy not one of these Negroes would bear to see his brother Negro praised or pushing on Immediately they would join the whites to crush him down You can have no idea about it until you come out of India It is all right for those who have plenty of money and position to let the world roll on such but I call him a traitor who having been educated nursed in luxury by the heart s blood of the downtrodden millions of toiling poor never

even takes a thought for them Where in what period of history your rich men noblemen your priests and potentates took any thought for the poor—the grinding of whose faces is the very life blood of their power ?

But the Lord is great the vengeance came sooner or later and they who sucked the life blood of the poor whose very education was at their expense whose very power was built on their poverty were in their turn sold as slaves by hundreds and thousands their wives and daughters dishonoured their property robbed for the last 1 000 years and do you think it was for no cause ?

Why amongst the poor of India so many are Mohammedans ? It is nonsense to say they were converted by the sword It was to gain their liberty from *the zemindars and from the priest* and as a consequence you find in Bengal there are more Mohammedans than Hindus amongst the cultivators because there were so many zemindars there Who thinks of raising these sunken downtrodden millions ? A few thousand graduates do not make a nation a few rich men do not make a nation True our opportunities are less but still there is enough to feed and clothe and make 300 millions more comfortable nay luxurious Ninety *per cent of our people are without education—who thinks* of that ?—these Babus the so called patriots ?

Now let me tell you—still there is a God no joke He is ordering our lives and although I know a nation of slaves cannot but try to bite at the hand that wants to give them medicine yet pray with me you—one of the few that have real sympathy for everything good for everything great one at least whom I know to be a man of true ring nobility of nature and a thorough sincerity of head and heart—pray with me

Lead kindly Light
amid th encircling gloom

I do not care what they say I love my God my religion my country and above all myself a poor beggar I love the poor the ignorant the downtrodden I feel for them—the Lord knows how much He will show me the way I do not care a fig for human approbation or criticism I think of most of them as ignorant noisy children—they have not penetrated into the inner nature of sympathy into the spirit which is all love

I have that insight through the blessing of Rama krishna I am trying to work with my little band all of these poor beggars like me you have seen them But the Lord s works have been always done by the lowly by the poor You bless me that I may have faith in my Guru in my God and in myself

The only way is love and sympathy The only worship is love

May He help you and yours ever and ever!

With prayers and blessings
VIVEKANANDA

## XXXV

*To Miss Mary Hale*

168 BRATTLE STREET
CAMBRIDGE
*8th December 1894*

DEAR SISTER

I have been here three days We had a nice lecture from Lady Henry Somerset I have a class every morn ing here on Vedanta and other topics Perhaps you have got the copy of *Vedantism* by this time which I left with

Mother Temple to be sent over I went to dine with the Spaldings another day That day they urged me against my repeated protests to criticise the Americans I am afraid they did *not* relish it *It is of course always* impossible to do it What about Mother Church and *the family* at Chicago ? *I* had no letters from them a long time *I* would have run into town to see you before this had *I* time *I* am *kept* pretty busy the whole day Then there is the fear of not meeting you

If you have time you may write and I shall snatch the first opportunity to see you My time of course is *always in the afternoon so long I shall be here* that is until the 27th or 28th of this month I will have to be very busy in the morning till 12 or 1

With my love to you all

Ever your affectionate brother
VIVEKANANDA

## XXXVI

*To Miss Mary Hale*

CAMBRIDGE
*December 1894*

DEAR SISTER

*I* received your letter just now *If* it is not *against* the rules of your society why do you not come to see Mrs Ole Bull Miss Farmer and Mrs Adams the physical culturist from Chicago ?

*Any day you will find them there*

Yours ever affectionately
VIVEKANANDA

## XXXVII

*To Miss Mary Hale*

CAMBRIDGE
*21st December 1894*

DEAR SISTER

I had not anything from you since your last I am going away next Tuesday to New York You must have received Mrs Bull s letter in the meanwhile If you can not accept it I shall be very glad to come over any day— I have time now as the lectures are at an end except Sunday next

Yours ever affectionately
VIVEKANANDA

## XXXVIII

*To Miss Isabelle McKindley*

528 5TH AVE NEW YORK
*24th Jan 1895*

DEAR MISS BELL

I hope you are well

My last lecture was not very much appreciated by the *men* but awfully so by *vemen* You know this Brooklyn is the centre of anti women s rights movements and when I told them that women deserve and are fit for everything they did not like it of course Never mind the women were in ecstasies

I have got again a little cold I am going to the Guernseys I have got a room downtown also where I will go several hours to hold my classes etc Mother Church must be all right by this time and you are all enjoying

nice weather Give Mrs Adams mountain high love and regard from me when you see her next

Send my letters as usual to the Guernseys

With love for all

Ever your aff bro
VIVEKANANDA

## XXXIX

*To Mr Francis Leggett*

NEW YORK
*10th April 1895*

DEAR FRIEND

It is impossible to express my gratitude for your kindly inviting me to your country seat [Ridgley] *I am involved* in a mistake now and find it impossible for me to come tomorrow To morrow I have a class at Miss Andrews of 40 W 9th Street As I was given to understand by Miss MacLeod that that class could be postponed I was only too glad at the prospect of joining the company tomorrow But I find that Miss MacLeod was mistaken and Miss Andrews came to tell me that she could not by any means stop the class tomorrow or even give notice to the members who are about 50 or 60 in number In view of this I sincerely regret my inability and hope that Miss MacLeod and Mrs Sturgis will understand that it is an unavoidable circumstance and not the will that stands in the way of my taking advantage of your kind invitation I shall only be too glad to come day after tomorrow or any other day this week as it suits you

Ever sincerely yours
VIVEKANANDA

## XL

*To Mr E T Sturdy*

54 W 33RD 7TREET
NEW YORK
*24th Apnl 1895*

DEAR FRIEND

I am perfectly aware that although some truth under lies the mass of mystical thought which has burst upon the Western world of late it is for the most part full of motives unworthy or insane For this reason I have never had anything to do with these phases of religion either in India or elsewhere and mystics as a class are not very favourable to me

I quite agree with you that only the Advaita philos ophy can save mankind whether in East or West from devil worship and kindred superstitions giving tone and strength to the very nature of man India herself requires this quite as much or even more than the West Yet it is hard uphill work for we have first to create a taste then teach and lastly proceed to build up the whole fabric

Perfect sincerity holiness gigantic intellect and an all conquering will Let only a handful of men work with these and the whole world will be revolutionised I did a good deal of platform work in this country last year and received plenty of applause but found that I was only working for myself It is the patient upbuilding of character the intense struggle to *realise* the truth which alone will tell in the future of humanity So this year I am hoping to work along this line—training up to practical Advaita realisation a small band of men and women I do not know how far I shall succeed The West is the field for work if a man wants to benefit humanity rather than his own particular sect or country I agree per fectly as to your idea of a magazine But I have no

business capacity at all to do these things I can teach and preach and sometimes write But I have intense faith in Truth The Lord will send help and hands to work with me Only let me be perfectly pure perfectly sincere and perfectly unselfish

Truth alone triumphs not untruth through truth alone stretches the way to the Lord (Atharva Veda) He who gives up the little self for the world will find the whole universe his I am very uncertain about coming to England I know no one there and here I am doing some work The Lord will guide in His own time

## XLI

*To Mr E T Sturdy*

19 W 38TH ST
NEW YORK

DEAR FRIEND

I received your last duly and as I had a previous arrangement to come to Europe by the end of this August I take your invitation as a Divine Call

Truth alone triumphs not untruth Through truth alone lies the way to Devayâna (the way to the gods) Those who think that a little sugar coating of untruth helps the spread of truth are mistaken and will find in the long run that a single drop of poison poisons the whole mass The man who is pure and who dares does all things May the Lord ever protect you from illusion and delusion! I am ever ready to work with you and the Lord will send us friends by the hundred if only we be our own friends first 'The Âtman alone is the friend of the Atman

Europe has always been the source of social and Asia of spiritual power and the whole history of the world is the tale of the varying combinations of those two

powers Slowly a new leaf is being turned in the story of humanity The signs of this are everywhere Hundreds of new plans will be created and destroyed Only the fit will survive And what but the true and the good is the fit?

Yours etc
VIVEKANANDA

## XLII

*To the Hale Sisters*

NEW YORK
*5th May 1895*

DEAR BABIES

What I expected has come I always thought that although Prof Max Muller in all his writings on the Hindu religion adds in the last a derogatory remark he must see the whole truth in the long run As soon as you can get a copy of his last book *Vedantism* there *you will find him swallowing the whole of it—reincarnation* and all

Of course you will find it difficult at all to under stand as it is only a part of what I have been telling you all this time

Many points you will find smack of my paper in Chicago

I am glad now the old man has seen the truth because that is the only way to have religion in the face of modern research and science

Hope you are enjoying Todd s *Rajasthan*

With all love your brother
VIVEKANANDA

PS *When is Miss Mary coming to Boston?—V*

## XLIII

*To Alasinga Perumal*

c/o Miss Phillips
19 west 38th street
new york
*28th May 1895*

Dfar Alasinga

Herewith I send a hundred dollars or £20-8-7 in English money Hope this will go just a little in starting your paper Hoping to do more by and by

I remain ever yours with blessings
Vivekananda

PS Reply immediately to it C/o the above address New York will be my headquarters henceforth

I have succeeded in doing something in this country at last V

## XLIV

*To Miss Josephine MacLeod*

21 w 34th st
new york
*June 1895*

Dear Joe

Experiences are gathering a bit thick round you I am sure they will lift many a veil more

Mr Leggett told me of your phonograph I told him to get a few cylinders—I talk in them through somebody s phonograph—and send them to Joe to which he replied that he could buy one because I always do what Joe asks me to do I am glad there is so much of hidden poetry in his nature

I am going today to live with the Guernseys as the doctor wants to watch me and cure me Doctor Guernsey after examining other things was feeling my

pulse when suddenly Landsberg (whom they had for bidden the house) got in and retreated immediately after seeing me Dr Guernsey burst out laughing and declared he would have paid that man for coming just then for he was then sure of his diagnosis of my case The pulse before was so regular but just at the sight of Landsberg it almost stopped from emotion It is sure only a case of nervousness He also advises me strongly to go on with doctor Helmer s treatment He thinks Helmer will do me a world of good and that is what I need now Is not he broad?

I expect to see the sacred cow today in town I will be in New York a few days more Helmer wants me to take three treatments a week for four weeks then two a week for four more and I will be all right In case I go to Boston he recommends me to a very good *ostad* (expert) there whom he would advise on the matter

I said a few kind words to Landsberg and went upstairs to Mother Guernsey to save poor Landsberg from embarrassment

Ever yours in the Lord
VIVEKANANDA

## XLV

*To Miss Mary Hale*
(Written on birch bark)

PERCY N H
*17th June 1895*

DEAR SISTER

Going tomorrow to the Thousand Islands care Miss Dutcher s Thousand Island Park N Y Where are you now? Where will you all be in summer? I have a chance of going to Europe in August I will come to see you before I go So write to me Also I expect books

and letters from India Kindly send them care Miss Phillips 19 W 38th Street N Y This is the bark in which all holy writings are written in India So I write Sanskrit May the husband of Uma (Shiva) protect you always

May you all be blessed ever and ever

VIVEKANANDA

## XLVI

*To Miss Mary Hale*

54 W 33RD STREET
NEW YORK
*22nd June 1895*

DEAR SISTER

The letters from India and the parcel of books reached me safe I am so happy to know of Mr Sam s arrival *I* am sure he is bewaring of *the* vidders nicely I met a friend of Mr Sam s one day on the street He is an Englishman with a name ending in ni He was very nice He said he was living in the same house with Sam somewhere in Ohio

I am going on pretty nearly in the same old fashion Talking when I can and silent when forced to be I do *not know whether I will go to Greenacre this* summer I saw Miss Farmer the other day She was in a hurry to go away so I had but very little talk with her She is a noble noble lady

How are you going on with your Christian Science lessons? I hope you will go to Greenacre There you will find quite a number of them and also the Spiritualists table turnings palmists astrologers etc etc You will get all the cures and all the isms presided over by Miss Farmer

Landsberg has gone away to live in some other place so I am left alone I am living mostly on nuts and fruits and milk and find it very nice and healthy too I hope to lose about 30 to 40 lbs this summer That will be all right for my size I am afraid I have forgotten all about Mrs Adam s lessons in walking I will have to renew them when she comes again to N Y Gandhi has gone to England *en route* to India from Boston I suppose

I would like to know about his chaperon Mrs Howard and her present bereaved state I am very glad to hear that the rugs did not go down to the bottom of the Atlantic and are at last coming

This year I could hardly keep my head up and I did not go about lecturing The three great commentaries on the Vedanta philosophy belonging to the three great sects of dualists qualified dualists and monists are being sent to me from India Hope they will arrive safe Then I will have an intellectual feast indeed I intend to write a book this summer on the Vedanta philosophy This world will always be a mixture of good and evil of happiness and misery this wheel will ever go up and come down dissolution and resolution is the inevitable law Blessed are those who struggle to go beyond Well I am glad all the babies are doing well but sorry there was no catch even this winter and every winter the chances are dwindling down Here near my lodgings is the Waldorf Hotel the rendezvous of lots of titled but penniless Europeans on show for Yankee heiresses to buy You may have any selection here the stock is so full and varied There is the man who talks no English there are others who lisp a few words which no one can understand and others are there who talk nice English but their chance is not so great as that of the dumb ones—the girls do not think them enough foreign who talk plain English fluently

I read somewhere in a funny book that an American vessel was being foundered in the sea the men were desperate and as a last solace wanted some religious service being done There was Uncle Josh on board who was an elder in the Presbyterian Church They all began to entreat Do something religious Uncle Josh! We are all going to die Uncle Joseph took his hat in his hand and took up a collection on the spot!

That is all of religion he knew And that is more or less characteristic of the majority of *such people* Collections are about all the religion they know or will ever know Lord bless them Good bye for the present I am going to eat something I feel very hungry

Yours affectionately
VIVEKANANDA

## XLVII

*To Miss Mary Hale*

c/o MISS DUTCHER
THOUSAND ISLAND PARK N Y
*26th June 1895*

DEAR SISTER

Many thanks for the Indian mail It brought a good deal of good news You are enjoying by this time I hope the articles by Prof Max Müller on the Immortality of the Soul which I sent to Mother Church The old man has taken in Vedanta bones and all and has boldly come out I am so glad to know the arrival of the rugs Was there any duty to pay? If so I will pay that I insist on it There will come another big packet from the Raja of Khetri containing some shawls and brocades and nick nacks I want to present them to

different friends But they are not going to arrive before some months I am sure

I am asked again and again as you will find in the letters from India to go over They are getting desperate Now if I go to Europe I will go as the guest of Mr Francis Leggett of N Y He will travel all over Germany England France and Switzerland for six weeks From there I shall go to India or I may return to America I have a seed planted here and wish it to grow This winter s work in N Y was splendid and it may die if I suddenly go over to India so I am not sure about going to India soon

Nothing noticeable has happened during this visit to the Thousand Islands The scenery is very beautiful and I have some of my friends here with me to talk about God and soul *ad libitum* I am eating fruits and drinking milk and so forth and studying huge Sanskrit books on Vedanta which they have kindly sent me from India

If I come to Chicago I cannot come at least within six weeks or more Baby needn t alter any of her plans for me I will see you all somehow or other before I go

You fussed so much over my reply to Madras but it has produced a tremendous effect there A late speech by the President of the Madras Christian College Mr Miller embodies a large amount of my ideas and declares that the West is in need of Hindu ideas of God and man and calls upon the young men to go and preach to the West This has created quite a furore of course amongst the Missions What you allude to being published in the *Arena* I did not see a bit of it The women did not make any fuss over me at all in New York Your friend must have drawn on his imagination They were not of the bossing type at all I hope Father Pope will go to Europe and Mother Church too Travelling is the best thing in life I am afraid I shall

die if made to stick to one place for a long time Nothing like a nomadic life

The more the shades around deepen the more the ends approach and the more one understands the true meaning of life that it is a dream and we begin to understand the failure of everyone to grasp it for they only attempted to get meaning out of the meaningless To get reality out of a dream is boyish enthusiasm Everything is evanescent everything is changeful — knowing this the sage gives up both pleasure and pain and becomes a witness of (the universe) this panorama without attaching himself to anything

They indeed have conquered Heaven even in this life whose mind has become fixed in *sameness* God is pure and same to all therefore they are said to be *in God* (Gita V 19) Desire ignorance and inequality —this is the trinity of bondage

Denial of the will to live knowledge and same sightedness is the trinity of liberation

*Freedom* is the goal of the universe

Nor love nor hate nor pleasure nor pain nor death nor life nor religion nor irreligion not this not this not this

Yours ever
VIVEKANANDA

## XLVIII

*To Miss Mary Hale*

c/o MISS DUTCHER
THOUSAND ISLAND PARK N Y

DEAR SISTER

Many thanks for the Indian mail I cannot express in words my gratitude to you As you have already read

in Max Muller s article on Immortality I sent Mother Church that he thinks that those we love in this life we must have loved in the past so it seems I must have belonged to the Holy Family in some past life I am expecting some books from India I hope they have arrived If so will you kindly send them over here? If any postage is due I shall send it as soon as I get intimation You did not write about the duty on the rugs there will be another big packet from Khetri containing carpets and shawls and some brocades and other nick nacks I have written them to get the duty paid there if it is possible through the American Council in Bombay If not I shall have to pay it here I do not think they will arrive for some months yet I am anxious about the books Kindly send them as soon as they arrive

My love to Mother and Father Pope and all the sisters I am enjoying this place immensely Very little eating and good deal of thinking and talking and study A wonderful calmness is coming over my soul Every day I feel I have no duty to do I am always in eternal rest and peace It is He that works We are only the instruments Blessed be His name! The threefold bondage of lust and gold and fame is as it were fallen from me for the time being and once more even here I feel what sometimes I felt in India From me all difference has fallen all right or wrong all delusion and ignorance has vanished I am walking in the path beyond the qualities What law I obey what disobey? From that height the universe looks like a mud puddle Hari Om Tat Sat He exists nothing else does I in Thee and Thou in me Be Thou Lord my eternal refuge! Peace Peace Peace! Ever with love and blessings

Your brother
VIVEKANANDA

happen to know about) hundreds of these are struggling at the present moment In India dualistic formulae are already on the wane the Advaita alone holds the field in force In America many movements are struggling for the mastery All these represent Advaita thought more or less and that series which is spreading most rapidly approaches nearer to it than any of the others Now if anything was ever clear to me it is that one of these must survive swallowing up all the rest to be the power of the future Which is it to be ?

Referring to history we see that only that fragment which is fit will survive and what makes fit to survive but *character* ? Advaita will be the future religion of thinking humanity No doubt of that And of all the sects they alone shall gain the day who are able to show most character in their lives no matter how far they may be

Let me tell you a little personal experience When my Master left the body we were a dozen penniless and unknown young men Against us were a hundred powerful organisations struggling hard to nip us in the bud But Ramakrishna had given us one great gift the desire and the lifelong struggle not to talk alone but to *live the life* And today all India knows and reverences the Master and the truths he taught are spreading like wild fire Ten years ago I could not get a hundred persons together to celebrate his birthday anniversary Last year there were fifty thousand

Neither numbers nor powers nor wealth nor learning nor eloquence nor anything else will prevail but *purity living the life* in one word *anubhuti* realisation Let there be a dozen such lion souls in each country lions who have broken their own bonds who have touched the Infinite whose whole soul is gone to Brahman who care neither for wealth nor power nor fame and these will be *enough* to shake the world

Here lies the secret Says Patanjali the father of Yoga When a man rejects all the superhuman powers then he attains to the cloud of virtue He sees God He becomes God and helps others to become the same This is all I have to preach Doctrines have been expounded enough There are books by the million Oh for an ounce of practice!

As to societies and organisations these will come of themselves Can there be jealousy where there is nothing *to be jealous of ? The names of those who will wish to* injure us will be legion But is not that the surest sign of our having the truth ? The more I have been opposed the more my energy has always found expression I have been driven and worshipped by princes I have been slandered by priests and laymen alike But what of it ? Bless them all! They are my very Self and have they not helped me by acting as a spring board from which my energy could take higher and higher flights ?

I have discovered one great secret—I have nothing to fear from *talkers* of religion And the great ones who realise—they become enemies to none! Let talkers talk! They know no better! Let them have their fill of name and fame and money and woman Hold we on to realisation to being Brahman to becoming Brahman Let us hold on to truth unto death and from life to life Let us not pay the least attention to what others say and if after a lifetime s effort one soul only one can break the fetters of the world and be free *we have done our work* Hari Om!

One word more Doubtless I do love India But every day my sight grows clearer What is India or England or America to us ? We are the servants of that God who by the ignorant is called MAN He who *pours water at the root does he not water the whole* tree?

There is but one basis of well being social political or spiritual—to know that I and my brother are one This is true for all countries and all people And Westerners let me say will realise it more quickly than Orientals who have almost exhausted themselves in formulating the idea and producing a few cases of individual realisation

Let us work without desire for name or fame or rule over the others Let us be free from the triple bonds of lust greed of gain and anger And the truth is with us!

Ever yours in the Lord
VIVEKANANDA

## LI

*To Mr E T Sturdy*

C/o MISS MACLEOD
HOTEL HOLLANDE
RUE DE LA PAIX
PARIS
*5th September 1895*

DEAR AND BLESSED FRIEND

It is useless to express my gratitude for your kindness it is too great for expression

I have a cordial invitation from Miss Müller and as her place is very near to yours I think it will be nice to come to her place first for a day or two and then to come over to you

My body was very ill for a few days which caused this delay in writing you

Hoping soon for the privilege of mingling hearts and heads together

I remain ever yours in love and fellowship in the Lord

VIVEKANANDA

## LII

*To Miss Josephine MacLeod*

C/o E T Sturdy Esq
HIGH VIEW CAVERSHAM
READING ENGLAND
*September 1895*

Dear Joe Joe

A thousand pardons for not promptly writing to you I arrive safe in London Found my friend and am all right in his home It is beautiful His wife is surely an angel and his life is full of India He has been years there—mixing with the Sannyasins eating their food etc etc so you see I am very happy I found already several retired Generals from India they were very civil and polite to me That wonderful knowledge of the Americans that identify every black man with the negro is entirely absent here and nobody even stares at me in the street

I am very much more at home here than anywhere out of India The English people know us we know them The standard of education and civilisation is very high here—that makes a great change so does the education of many generations

Have the Turtle doves returned ? The Lord bless them and theirs for ever and ever How are the babies—Alberta and Holister ? Give them my oceans of love and know it yourself

My friend being a Sanskrit scholar we are busy working on the great commentaries of Shankara etc Nothing but philosophy and religion here Joe Joe I am going to try to get up classes in October in London

Ever affectionately with love and blessings

Vivekananda

## LIII*

*To Swami Abhedananda*

C/o E T Sturdy
HIGH VIEW CAVERSHAM
READING ENGLAND
*October 1895*

Dear Kali

You may have got my earlier letter At present send all letters to me at the above address Mr Sturdy is known to Târakdâ He has brought me to his place and we are both trying to create a stir in England I shall this year leave again in November for America So I require a man well up in Sanskrit and English particularly the latter language—either Shashi or you or Sârada Now if you have completely recovered very well you come otherwise send Sharat The work is to teach the devotees I shall be leaving here to make them study the Vedanta to do a little translation work into English and to deliver occasional lectures Work is apt to cloud spiritual vision X—is very eager to come but unless the foundation is strongly laid there is every likelihood of everything toppling down I am sending you a cheque along with this letter Buy clothes and other necessary things—whoever comes I am sending the cheque in the name of Master Mahâshay Mahendra Babu Gangâdhar s Tibetan *choga* is in the Math get the tailor to make a similar *choga* of gerua colour See that the collar is a little high that is the throat and neck should be covered Above all you must have a woollen overcoat for it is very cold If you do not put on an overcoat on the ship you will suffer much I am sending a second class ticket as there is not much difference between a first class and a second class berth

If it is decided to send Shashi then inform the

purser of the ship beforehand to provide him with vegetarian diet

Go to Bombay and see Messrs King King & Co Fort Bombay and tell them that you are Mr Sturdy s man They will then give you a ticket to England A letter is being sent from here to the Company with instructions I am writing to the Maharaja of Khetri to instruct his Bombay agent to look after the booking of your passage If this sum of Rs 150/ is not sufficient for your outfit get the remainder from Rakhal I shall send him the amount afterwards Keep another Rs 50/ for pocket expenses—take it from Rakhal I shall pay back later I have not up to now got any acknowledgment of the amount I sent to Chuni Babu Start as quickly as possible Inform Mahendra Babu that he is my Calcutta agent Tell him to send a letter to Mr Sturdy by next mail informing him that he is ready to look after all business transactions in Calcutta on your behalf In effect Mr Sturdy is my secretary in England Mahendra Babu in Calcutta and Alasinga in Madras Send this information to Madras also Can any work be done unless all of us gird up our loins ? And be up and doing ! Fortune favours the brave and energetic Don t look back—forward infinite energy infinite enthusiasm infinite daring and infinite patience—then alone can great deeds be accomplished We must set the whole world afire

Now on the day the steamer is due to start write a letter to Mr Sturdy informing him by which steamer you are leaving for England Otherwise there is some likelihood of your having difficulties when you reach London Take the ship that comes directly to London for even if it takes a few days longer on the voyage the fares are less At the moment our purse is lean In time we shall send preachers in large numbers to all the quarters of the globe

Yours affectionately
VIVEKANANDA

PS Write at once to the Maharaja of Khetri that you are going to Bombay and that you will be glad if his agent attends to the booking of your passage and sees you off on board

Keep my address with you written in a pocket book lest there should be difficulties afterwards

## LIV

*To Miss Josephine MacLeod*

HIGH VIEW CAVERSHAM
READING ENGLAND
*October 1895*

DEAR JOE JOE

I was so glad to hear from you I was afraid you had forgotten me

I am going to have a few lectures in and about London One of them a public one will be at Princes Hall on the 22nd at 8-30

Come over and try to form a class I have as yet done almost nothing here Of course breaking the ice is slow always It took me two years in America to work up that little which we had in New York

With love for all

Yours ever
VIVEKANANDA

## LV

*To Miss Josephine MacLeod*

HIGH VIEW CAVERSHAM
READING ENGLAND
*20th October 1895*

DEAR JOE JOE

This note is to welcome the Leggetts to London This being in a sense my native country I send you my

welcome first I shall receive your welcome next Tuesday the 22nd at Princes Hall half past eight p m

I am so busy till Tuesday I am afraid I shall not be able to run in to see you I however shall come to see you any day after that Possibly I may come on Tuesday

With everlasting love and blessings

Yours
VIVEKANANDA

## LVI

*To Miss Josephine MacLeod*

80 OAKLEY STREET
CHELSEA
*31st October 1895*

DEAR JOE JOE

I shall be only too glad to come to lunch on Friday and see Mr Coit at the Albemarle

Two American ladies mother and daughter living in London came in to the class last night—Mrs and Miss Netter They were very sympathetic of course The class there at Mr Chamier s is finished I shall begin at my lodgings from Saturday night next I expect to have a pretty good sized room or two for my classes I have been also invited to Moncure Conways s Ethical Society where I speak on the 10th I shall have a lecture in the Balboa Society next Tuesday The Lord will help I am not sure whether I can go up with you on Saturday You will have great fun in the country anyway and Mr and Mrs sturdy are such nice people

With love and blessings
Vi ..

PS Kindly *order some vegetables for me* I don t care much for rice—bread will do as well I have become an awful vegetarian now

V

## LVII

*To Mr E T Sturdy*

80 OAKLEY ST CHELSEA
*31st October 1895* 5 P M

DEAR FRIEND

Just now two young gentlemen Mr Silverlock and his friend left Miss Muller also came this afternoon and left just when these gentlemen came in

One is an Engineer and the other is in the grain trade They have read a good deal of modern philosophy and science and have been much struck by the similarity with the latest conclusions of both with the ancient Hindu thought They are very fine intelligent and educated men One has given up the Church the other asked me whether he should or not Now two things struck me after this interview First we must hurry the book through We will touch a class thereby who are philosophically religious without the least mystery mongering Second both of them want to know the rituals of my creed! This opened my eyes The world in general must have some form In fact in the ordinary sense religion is philosophy concretised through rituals and symbols

It is absolutely necessary to form some ritual and have a Church That is to say we must fix on some ritual as fast as we can If you can come Saturday morning or

sooner we shall go to the Asiatic Society library or you can procure for me a book which is called *Hemâdri Kosha* from which we can get what we want and kindly bring the Upanishads We will fix something grand from birth to death of a man A mere loose system of philosophy gets no hold on mankind

If we can get it through before we have finished the classes and publish it by publicly holding a service or two under it it will go on They want to form a congregation and they want ritual that is one of the causes why—will never have a hold on Western people

The Ethical Society has sent me another letter thanking me for the acceptance of this offer Also a copy of their forms They want me to bring with me a book from which to read for ten minutes Will you bring the Gita (translation) and the Buddhist Jâtaka (translation) with you?

I would not do anything in this matter without seeing you first

Yours with love and blessings
VIVEKANANDA

## LVIII

*To Mr E T Sturdy*

80 OAKLEY STREET
CHELSEA
*1st November 1895*

DEAR FRIEND

The tickets of the Balleren (?) Society are 35 in number

The subject is Indian Philosophy and Western Society Chairman blank

As you did not ask me to send them over I do not I got your letters properly

Yours in the Sat
VIVEKANANDA

## LIX

*To Mr E T Sturdy*

*2nd November 1895*

DEAR FRIEND

I think you are right we shall work on our own lines and let things grow

I send you the note of the lecture

I shall come on Sunday if nothing extraordinary prevents me

Yours with love
VIVEKANANDA

## LX

*To Mr E T Sturdy*

R M S BRITANNIC

BLESSED AND BELOVED

So far the journey has been very beautiful The purser has been very kind to me and gave me a cabin

to myself The only difficulty is the food—meat meat meat Today they have promised to give me some vegetables

We are standing at anchor now The fog is too thick to allow the ship to proceed So I take this oppor tunity to write a few letters

It is a queer fog almost impenetrable though the sun is shining bright and cheerful Kiss baby for me and with love and blessings for you and Mrs Sturdy

I remain Yours
VIVEKANANDA

PS Kindly convey my love to Miss Muller I left the night shirt at Avenue Road So I shall have to do without any until the trunk is brought out of the hold

## LXI

*To Mr E T Sturdy*

228 WEST 39 STREET
NEW YORK
*8th December 1895*

DEAR FRIEND

After ten days of a most tedious and rough voyage I safely arrived in New York My friends had already engaged some rooms at the above where I am living now and intend to hold classes ere long In the meanwhile the T—s have been alarmed very much and are trying their best to hurt me but they and their followers are of no consequence whatever

I went to see Mrs Leggett and other friends and they are as kind and enthusiastic as ever

Did you hear anything from India about the coming Sannyasin?

I will write later fuller particulars of the work here

Kindly convey my best love to Miss Muller and to Mrs Sturdy and all the other friends and kiss baby for me

Yours ever in the Sat
VIVEKANANDA

## LXII

*To Miss Josephine MacLeod*

28 WEST 39TH STREET
NEW YORK
*8th December 1895*

DEAR JOE JOE

After 10 days of the most disastrous voyage I ever had I arrived in New York I was so so sick for days together

After the clean and beautiful cities of Europe New York appears very dirty and miserable I am going to begin work next Monday Your bundles have been safely delivered to the heavenly pair as Alberta calls them They are as usual very kind Saw Mrs and Mr Salomon and other friends By chance met Mrs Peak at Mrs Guernsey s but yet have no news of Mrs Rothinburger Going with the birds of paradise to Ridgley this Christmas Wish ever so much you were there

Had you a nice visit with Lady Isabelle? Kindly give my love to all our friends and know oceans yourself

Excuse this short letter I shall write bigger ones by the next

Ever yours in the Lord
VIVEKANANDA

## LXIII

*To Mr E T Sturdy*

NEW YORK
*1895*

The work here is going on splendidly I have been working incessantly at two classes a day since my arrival Tomorrow I go out of town with Mr Leggett for a week s holiday Did you know Madame Antoinette Sterling one of your greatest singers? She is very much interested in the work

I have made over all the secular part of the work to a committee and am free from all that botheration I have no aptitude for organising It nearly breaks me to pieces

What about the *Narada Sutra*? There will be a good sale of the book here I am sure I have now taken up the *Yoga-Sutras* and take them up one by one and go through all the commentators along with them These talks are all taken down and when completed will form the fullest annotated translation of Patanjali in English Of course it will be rather a big work

At Trubner s I think there is an edition of *Kurma Purana* The commentator Vijnâna Bhikshu is continually quoting from that book I have never seen the book myself Will you kindly find time to go and see if in it there are some chapters on Yoga? If so will you kindly send me a copy? Also of the *Hatha Yoga*

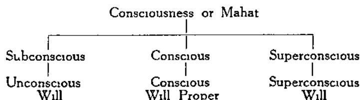
*Pradipikâ Shiva Samhita* and any other book on Yoga? The originals of course I shall send you the money for them as soon as they arrive Also a copy of *Sankhya Kârikâ* of Ishwara Krishna by John Davies Just now your letter reached along with Indian letters The one man who is ready is ill The others say that they cannot come over on the spur of the moment So far it seems unlucky I am sorry they could not come What can be done? Things go slow in India!

Ramanuja s theory is that the bound soul or Jiva has its perfections involved entered into itself When this perfection again evolves it becomes free The Advaitin declares both these to take place only in show there was neither involution nor evolution Both pro cesses were Maya or *apparent* only

In the first place the soul is not *essentially a know ing* being *Sachchidânanda* is only an approximate defi nition and *Neti Neti* is the essential definition Schopen hauer caught this idea of willing from the Buddhists We have it also in *Vâsana* or *Trishnâ* Pali *tanha* We also admit that it is the *cause* of all manifestations which are in their turn its effects But being a cause it must be a combination of the *Absolute* and *Maya* Even knowl edge being a compound cannot be the Absolute itself but it is the nearest approach to it and higher than Vasana conscious or unconscious The Absolute first becomes the mixture of knowledge then in the second degree that of will If it be said that plants have no consciousness that they are at best only unconscious wills the answer is that even the *unconscious plant will* is a manifestation of the consciousness not of the plant *but of the cosmos* the Mahat of the Sankhya Philosophy The Buddhist analysis of everything into will is imperfect firstly because will is itself a compound and secondly because consciousness or knowledge which is a com pound of the first degree precedes it *Knowledge is*

*action First action then reaction* When the mind perceives then as the reaction it *wills* The will is in the mind So it is absurd to say that will is the last analysis Deussen is playing into the hands of the Darwinists

But evolution must be brought in accordance with the more exact science of Physics which can demonstrate that every evolution must be preceded by an involution This being so the evolution of the *Vasana* or will must be preceded by the involution of the *Mahat* or cosmic consciousness




There is no willing without knowing How can we desire unless we know the object of desire?

The apparent difficulty vanishes as soon as you divide knowledge also into subconscious and conscious And why not? If will can be so treated why not its father?

VIVEKANANDA

## LXIV

*To Mr E T Sturdy*

228 WEST 39TH STREET
NEW YORK
*16th December 1895*

BLESSED AND BELOVED

All your letters reached by one mail today Miss Muller also writes me one She has read in the *Indian*

*Mirror* that Swami Krishnananda is coming over to England If that is so he is the strongest man that I can get

The classes I had here were six in the week besides a question class The general attendance varies between 70 to 120 Besides every Sunday I have a public lecture The last month my lectures were in a small hall holding about 600 But 900 will come as a rule 300 standing and about 300 going off not finding room This week therefore I have a bigger hall with a capacity of holding 1200 people

There is no admission charged in these lectures but a collection covers the rent The newspapers have taken me up this week and altogether I have stirred up New York considerably this year If I could have remained here this summer and organised a summer place the work would be going on sure foundations here But as I intended to come over in May to England I shall have to leave it unfinished If however Krishnananda comes to England and you find him strong and able and if you find the work in London will not be hurt by my absence this summer I would rather be here this summer

Again I am afraid my health is breaking down under constant work I want some rest We are so unused to these Western methods especially the keeping to time I will leave you to decide all these The *Brahmavadin* is going on here very satisfactorily I have begun to write articles on Bhakti also send them a monthly account of the work Miss Muller wants to come to America I do not know whether she will or not Some friends here are publishing my Sunday lectures I have sent you a few copies of the first one I shall send you next mail a few of the next two lectures and if you like them I shall ask them to send you a number Can you manage to get a few hundred copies sold in England? That will encourage them in publishing the subsequent ones

Next month I go to Detroit then to Boston and Harvard University Then I shall have a rest and then I come to England unless you think that things go on without me and with Krishnananda

Ever yours with love and blessings
VIVEKANANDA

## LXV

*To Swami Saradananda*

228 WEST 39TH STREET
NEW YORK
*23rd December 1895*

DEAR SHARAT

Your letter only made me sad I see you have los all enthusiasm I know all of you your powers and your limitations I would not have called you to any task which you are incompetent to do The only task I would have given you was to teach elementary Sanskrit and with the help of dictionaries and other things assist S in his translations and teachings I would have moulded you to it Any one could have done as well—only a little smattering of Sanskrit was absolutely necessary Well everything is for the best If it is the Lord s work the right man for the right place will be forthcoming in the right time None of you need feel disturbed As for Sanyal I don t care who takes money or not but I have a strong hatred for child marriage I have suffered terribly from it and it is the great sin for which our nation has to suffer As such I would hate myself if I help such a diabolical custom directly or indirectly I wrote to you pretty plain about it and Sanyal had no right to play a hoax upon me about his law suit and his attempts to

become free I am sorry for his playing tricks on me who have never done him any harm This is the world What good you do goes for nothing but if you stop doing it then Lord help you you are counted as a rogue Isn t it? Emotional natures like mine are always preyed upon by relatives and friends This world is merciless This world is our friend when we are its slaves and no more This world is broad enough for me There will always be a corner found for me somewhere If the people of India do not like me there will be others who do I must set my foot to the best of my ability upon this devilish custom of child marriage No blame will entail on you You keep at a safe distance if you are afraid I am sorry very sorry I cannot have any partnership with such doings as getting husbands for babies Lord help me I never had and never will have Think of the case of—Babu! Did you ever meet a more cowardly or brutal one than that? I can kill the man who gets a husband for a baby The upshot of the whole thing is—I want bold daring adventurous spirits to help me Else I will work alone I have a mission to fulfil I will work it out alone I do not care who comes or who goes Sanyal is already done for by Samsâra Beware boy! That was all the advice I thought it my duty to give you Of course you are great folks now—my words will have no value with you But I hope the time will come when you will see clearer know better and think other thoughts than you are now doing

Good bye! I would not bother you any more and all blessings go with you all I am very glad I have been of some service to you sometimes if you think so At least I am pleased with myself for having tried my best to discharge the duties laid on me by my Guru and well done or ill I am glad that I tried So good bye Tell Sanyal that I am not at all angry with him but I am sorry very sorry It is not the money—that counts nothing—

but the violation of a principle that pained me and the trick he played on me Good bye to him also and to you all One chapter of my life is closed Let others come in their due order They will find me ready You need not disturb yourselves at all about me I want no help from any human being in any country So good bye! May the Lord bless you all for ever and ever!

VIVEKANANDA

## LXVI

*To Mr E T Sturdy*

RIDGELY MANOR
*29th December 1895*

DEAR FRIEND

By this time the copies of the lectures must have reached you Hope they may be of some use

I think in the first place there are so many difficulties to overcome in the second place they think that they are fit for nothing—that is the national disease thirdly they are afraid to face the winter at once the Tibet man they don t think is a very strong man to work in England Some one will come sooner or later

Yours in the Sat
VIVEKANANDA

PS My Christmas greetings to all our friends—to Mrs and Mr Johnson to Lady Margesson Mrs Clark Miss Hawes Miss Muller Miss Steel and all the rest —V

*Kiss baby for me and bless him My greetings to* Mrs Sturdy We will *work* Wah guru ki fateh —V

## LXVII

*To Miss Mary Hale*

NEW YORK
*6th January 1896*

DEAR SISTER

Many thanks for your kind New Year s greetings I am glad to learn you enjoyed your six weeks with the Esq although they be only golf playing I have been in the midst of the genuine article in England The English people received me with open arms and I have *very much toned down my ideas about the* English race First of all I found that those fellows as Lund etc who came over from England to attack me were nowhere Their existence is simply ignored by the English people None but a person belonging to the English Church is thought to be *genteel* Again some of the best men of England belonging to the English Church and some of the highest in position and fame became my truest friends This was quite another sort of experience *from what* I met in America was it not?

The English people laughed and laughed when I told them about my experience with the Presbyterians and other fanatics here and my receptions in hotels etc I also found at once the difference in culture and breeding between the two countries and came to understand why American girls go in shoals to be married to Europeans Everyone was kind to me there and I *have left* many noble friends of both sexes anxiously waiting my return in the spring

As to my work there the Vedantic thought has already permeated the higher classes of England Many

people of education and rank and amongst them not a few clergymen told me that the conquest of Rome by Greece was being re enacted in England

There are two sorts of Englishmen who have lived in India One consisting of those who hate everything Indian but they are uneducated The other to whom India is the holy land its very air is holy And they try to out Herod Herod in their Hinduism They are awful vegetarians and they want to form a caste in England Of course the majority of the English people are firm believers in caste I had eight classes a week apart from public lectures and they were so crowded that a good many people even ladies of high rank sat on the floor and did not think anything of it In England I find strong minded men and women to take up the work and carry it forward with the peculiar English grip and energy This year my work in New York is going on splendidly Mr Leggett is a very rich man of New York and very much interested in me The New Yorker has more steadiness than any other people in this country so I have determined to make my centre here In this country my teachings are thought to be queer by the Methodist and Presbyterian aristoc racy In England it is the highest philosophy to the English Church aristocracy

Moreover those talks and gossips so characteristic of the American woman are almost unknown in England The English woman is slow but when she works up to an idea she will have a hold on it sure and they are regularly carrying on my work there and sending every week a report—think of that! Here if I go away for a week everything falls to pieces My love to all—to Sam and to yourself May the Lord bless you ever and ever!

Your affectionate brother

VIVEKANANDA

LXVIII

*To Mr E T Sturdy*

228 WEST 39TH STREET
NEW YORK
*16th January 1896*

BLESSED AND BELOVED

Many many thanks for the books The *Sankhya Karika* is a very good book and the *Kurma Purana* though I do not find in it all I expected has a few verses on Yoga The words dropped in my last letter were Yoga Sutra which I am translating with notes from various authorities I want to incorporate the chapter in *Kurma Purana* in my notes I have very enthusiastic accounts of your classes from Miss MacLeod Mr Gals worthy seems to be very much interested now

I have begun my Sunday lectures here and also the classes Both are very enthusiastically received I make them all free and take up a collection to pay the hall etc Last Sunday s lecture was very much appreciated and is in the press I shall send you a few copies next week It was the outline of our work

As my friends have a stenographer (Goodwin) engaged all these class lessons and public lectures are taken down I intend to send you a copy of each They may suggest you some ideas

My great want here is a strong man like you possess ing intellect and ability and love In this nation of universal education all seem to melt down into a medioc rity and the few able are weighed down by the eternal money making

I have a chance of getting a piece of land in the country and some buildings on it plenty of trees and a river to serve as a summer meditation resort That of course requires a committee to look after it in my absence also the handling of money and printing and other matters

I have separated myself entirely from money questions yet without it the movement cannot go on So necessarily I have to make over everything executive to a committee which will look after these things in my absence Steady work is not in the line of the Americans The only way they work is in a herd So let them have it As to the teaching part my friends will go over this country from place to place each one independent and let them form independent circles That is the easiest way to spread Then when there will be sufficient strength we shall have yearly gatherings to concentrate our energies

The committee is entirely executive and it is confined to New York alone

Ever yours with love and blessings
VIVEKANANDA

## LXIX

*To Shri Alasinga Perumal*

*23rd January 1896*

DEAR ALASINGA

By this time you must have got enough of matter on Bhakti from me The last copy dated 21st December of *Brahmavadin* is in I have been smelling something since the last few issues of the *Brahmavadin* Are you going to join the Theosophists? This time you simply gave yourselves up Why you get in a notice of the Theosophists lectures in the body of your notes! Any suspicion of my connection with the Theosophists will spoil my work both in America and England and well it may They are thought by all people of sound mind to be wrong and true it is that they are held so and you know it full well I am afraid you want to overreach me You think you can get more subscribers in England by advertising Annie Besant? Fool that you are

I do not want to quarrel with the Theosophists but my position is entirely ignoring them Had they paid for the advertisement? Why should you go forward to advertise them? I shall get more than enough sub scribers in England when I go next

Now I would have no traitors I tell you plainly I would not be played upon by any rogue No hypocrisy with me Hoist your flag and give public notice in your paper that you have given up all connections with me and join the camp of the Theosophists or cease to have anything whatsoever to do with them I give you very plain words indeed I shall have one man only to follow me but he must be true and faithful unto death I do not care for success or no success I am tired of this nonsense of preaching all over the world Did any of C— s people come to my help when I was in England? Fudge! I must keep my movement *pure* or I will have none

Yours
VIVEKANANDA

PS Reply sharp your decision I am very decided on this point You ought to have told me so before had your intentions been such from the very beginning *The Brahmavadin* is for preaching Vedanta and not Theos ophy I almost lose my patience when I see these underhand dealings This is the world—those whom you love best and help most try to cheat you

V

## LXX

*To Mr E T Sturdy*

228 WEST 39TH STREET
NEW YORK
*29th February 1896*

BLESSED AND BELOVED

I am coming before May if possible You need not

worry about that The pamphlet was beautiful The newspaper cuttings from here will be forwarded if we can get them

The books and pamphlets here have been got up this way A committee was formed in New York They paid all the expenses of stenographing and printing on condition the books will belong to them So these pamphlets and books are theirs One book the *Karma Yoga* has been already published the *Raja Yoga* a much bigger one is in the course of publication the *Jnana Yoga* may be published later on These will be popular books the language being that of talk as you have seen already I have purged everything that is objectionable and they help me in getting up the books

The books are the property of this Committee of which Mrs Ole Bull is the principal backer also Mrs Leggett

It is only just that they should have the books as they paid all the expenses There is no fear of the publishers meddling with them as they are the publishers themselves

If any books come from India please keep them

The stenographer who is an Englishman named Goodwin has become so interested in the work that I have now made him a Brahmachârin and he is going round with me and we shall come over together to England He will be very helpful as he has been always

Yours with all blessings
VIVEKANANDA

## LXXI

*To Mr E T Sturdy*

NEW YORK
*17th March 1896*

BLESSED AND BELOVED

I received your last just now and it frightened me immensely

The lectures were delivered under the auspices of certain friends who paid for the stenography and all other expenses on condition they alone will have the right to publish them As such they have already published the Sunday lectures as well as three books on Karma Yoga Raja Yoga and Jnana Yoga The *Raja Yoga* especially has been much altered and re arranged along with the translation of Yoga Sutras of Patanjali The *Raja Yoga* is in the hands of Longmans The friends here are furious at the idea of these books being published in England and as they have been made over to them by me legally I am at a loss what to do The publication of the pamphlets was not so serious but the books have been so much re arranged and changed that the American edition will not recognise the English one Now pray don t publish these books as they will place me in a very false position and create endless quarrel and destroy my American work

By last mail from India I learn that a Sannyasin has started from India I had a beautiful letter from Miss Muller also one from Miss MacLeod the Leggett family has become very attached to me

I do not know anything about Mr Chatterji I hear from other sources that his trouble is money which the Theosophists cannot supply him with Moreover the help he will be able to give me is very rudimentary and use less in the face of the fact of a much stronger man coming

from India So far with him We need not be in a hurry

I pray you again to think about this publishing business and write some letters to Mrs Ole Bull and through her ask the opinion of the American friends of the Vedanta remembering ours is the Gospel of oneness of all beings and all national feelings are but wicked superstitions Moreover I am sure that the person who is always ready to give way to other s opinions finds at last that his opinion has triumphed Yielding always conquers at last With love to all our friends

Yours with love and blessings
VIVEKANANDA

PS I am coming sure in March as early as possible

V

## LXXII

*To Miss Mary Hale*

DEAR SISTER

I am afraid you are offended and did not answer any of my letters Now I beg a hundred thousand pardons By very good luck I have found the orange cloth and am going to have a coat made as soon as I can I am glad to hear you met Mrs Bull She is such a noble lady and kind friend Now sister there are two very thin Sanskrit pamphlets in the house Kindly send them over if it does not bother you The books from India have arrived safe and I had not to pay any duty on them I am surprised that the rugs do not arrive yet I have not been to see Mother Temple any more I could not find time Every little bit of time I get I spend in the library

With everlasting love and gratitude to you all

Ever your loving brother
VIVEKANANDA

PS Mr Howe has been a very constant student except the last few days Kindly give my love to Miss Howe

V

## LXXIII

*To the Hale Sisters*

6 WEST 43RD STREET
NEW YORK
*14th April 1896*

DEAR SISTERS

I arrived safe on Sunday and on account of illness could not write earlier I sail on board the White Star Line *Germanic* tomorrow at 12 noon With everlasting memory of love gratitude and blessings

I am your ever loving brother
VIVEKANANDA

## LXXIV

THURSDAY AFTERNOON
WAVENEY MANSIONS
FAIRHAZEL GARDENS
N W

DEAR STURDY

I forgot to tell you in the morning that Prof Max Müller also offered in his letter to me to do everything he could if I went to lecture at Oxford

Yours affectionately
VIVEKANANDA

PS Have you written for the *Atharva Veda Samhita* edited by Shankara Pandurang?

V

## LXXV

*To the Hale Sisters*

HIGH VIEW READING
*20th April 1896*

DEAR SISTERS

Greetings to you from the other shore The voyage has been pleasant and no sickness this time I gave myself treatment to avoid it I made quite a little run through Ireland and some of the old English towns and now am once more in Reading amidst Brahma and Maya and Jiva the individual and the universal soul etc The other monk is here he is one of the nicest of men I see and is quite a learned monk too We are busy editing books now Nothing of importance happened on the way It was dull monotonous and prosaic as my life I love America more when I am out of it And after all those years there have been some of the best I have yet seen

Are you trying to get some subscribers for the *Brahmavadin*? Give my best love and kindest remembrance to Mrs Adams and Mrs Conger Write me as soon as is convenient all about yourselves and what you are doing what breaks the monotony of eating drinking and cycling I am in a hurry just now shall write a bigger letter later so good bye and may you be always happy

Your ever affectionate brother
VIVEKANANDA

PS I will write to Mother Church as soon as I get time Give my love to Sam and sister Locke

LXXVI

*To Miss Mary Hale*

63 ST GEORGE S ROAD
LONDON S W
*30th May 1896*

DEAR MARY

Your letter reached just now Of course you were not jealous but all of a sudden were inspired with sympathy for poor India Well you need not be frightened Wrote a letter to Mother Church weeks ago but have not been able to get a line from her yet I am afraid the whole party have taken orders and entered a Catholic convent—four old maids are enough to drive any mother to a convent I had a beautiful visit with Prof Max Muller He is a saint—a Vedantist through and through What think you? He has been a devoted admirer of my old Master for years He has written an article on my Master in *The Nineteenth Century* which will soon come out We had long talk on Indian things I wish I had half his love for India We are going to start another little magazine here What about *The Brahmavadin*? Are you pushing it? If four pushful old maids cannot push a journal I am blowed You will hear from me now and then I am not a pin to be lost under a bushel I am having classes here just now I begin Sunday lectures from next week The classes are very big and are in the house We have rented it for the season Last night I made a dish It was such a delicious mixture of saffron lavender mace nutmeg cubebs cinnamon cloves cardamom cream limejuice onions raisins almonds pepper and rice that I myself could not eat it There was no asafoetida though that would have made it smoother to swallow

Yesterday I went to a marriage *a la mode* Miss Muller a rich lady a friend who has adopted a Hindu boy and to help my work has taken rooms in this house took us to see it One of her nieces was married to somebody s nephew I suppose What tiring nonsense! I am glad you do not marry Good bye love to all No more time as I am going to lunch with Miss MacLeod

Yours ever affectionately
VIVEKANANDA

## LXXVII

*To the Hale Sisters*

LONDON
*7th July 1896*

DEAR BABIES

The work here progressed wonderfully I had one monk here from India I have sent him to the U S A and sent for another from India The season is closed the classes therefore and the Sunday lectures are to be closed on the 16th next And on the 19th I go for a month or so for quiet and rest in the Swiss Mountains to return next autumn to London and begin again The work here has been very satisfactory By rousing interest here I really do more for India than in India Mother wrote to me that if you could rent your flat she would be glad to take you with her to see Egypt I am going with three English friends to the Swiss Hills Later on towards the end of winter I expect to go to India with some English friends who are going to live in my monastery there which by the by is in the air yet It is struggling to materialise somewhere in the Himalayas

Where are you? Now the summer is in full swing

even London is getting very hot Kindly give my best love to Mrs Adams Mrs Conger and all the rest of my friends in Chicago

Your affectionate brother

VIVEKANANDA

## LXXVIII

*To Mr E T Sturdy*

GRAND HOTEL
VALAIS
SWITZERLAND

BLESSED AND BELOVED

I am reading a little starving a good deal and practising a good deal more The strolls in the woods are simply delicious We are now situated under three huge glaciers and the scenery is very beautiful

By the by whatever scruples I may have had as to the Swiss lake origin of the Aryans have been taken clean off my mind The Swiss is a Tartar *minus* a pigtail

Yours ever affectionately

VIVEKANANDA

## LXXIX

*To Mr E T Sturdy*

SWITZERLAND
*5th August 1896*

BLESSED AND BELOVED

A letter came this morning from *Prof Max Muller* telling me that the article on Shri Ramakrishna Parama hamsa has been published in *The XIX Century* August

number Have you read it? He asked my opinion about it Not having seen it yet I can t write anything to him If you have it kindly send it to me Also *The Brahmavadin* if any have arrived Max Muller wants to know about our plans and again about the magazine He promises a good deal of help and is ready to write a book on Shri Ramakrishna Paramahamsa

I think it is better that you should directly correspond with him about the magazine etc You will see from his letter which I shall send you as soon as I have replied (after reading *The XIX Century*) that he is very much pleased with our movement and is ready to help it as much as he can

Yours with blessings and love
VIVEKANANDA

PS I hope you will consider well the plan for the big magazine Some money can be raised in America and we can keep the magazine all to ourselves at the same time I intend to write to America on hearing about the plan you and Prof Max Muller decide upon A great tree is to be taken refuge in when it has both fruits and shade If however we do not get the fruit who prevents our enjoyment of the shade? So ought great attempts to be made is the moral

## LXXX

### *To Mr J J Goodwin*

SWITZERLAND
*8th August 1896*

DEAR GOODWIN

I am now taking rest I read from different letters a lot about Kripananda I am sorry for him There must be something wrong in his head Let him alone None of you need bother about him

As for hurting me that is not in the power of gods or devils So be at rest It is unswerving love and perfect unselfishness that conquer everything We Vedantists in every difficulty ought to ask the subjective question Why do I see that? Why can I not conquer this with love?

I am very glad at the reception the Swami has met with also at the good work he is doing Great work requires great and persistent effort for a long time Neither need we trouble ourselves if a few fail It is in the nature of things that many should fall that troubles should come that tremendous difficulties should arise that selfishness and all the other devils in the human heart should struggle hard when they are about to be driven out by the fire of spirituality The road to the Good is the roughest and steepest in the universe It is a wonder that so many succeed no wonder that so many fall Character has to be established through a thousand stumbles

I am much refreshed now I look out of the window and see the huge glaciers just before me and feel that I am in the Himalayas I am quite calm My nerves have regained their accustomed strength and little vexations like those you write of do not touch me at all How shall I be disturbed by this child s play? The whole world is a mere child s play—preaching teaching and all included Know him to be the Sannyasin who neither hates nor desires And what is there to be desired in this little mud puddle of a world with its ever recurring misery disease and death? He who has given up all desires he alone is happy

This rest eternal peaceful rest I am catching a glimpse of now in this beautiful spot Having once known that the Atman alone and nothing else exists

desiring what or for whose desire shall you suffer misery about the body? (Brihadaranyaka IV iv 12)

I feel as if I had my share of experience in what they call work I am finished I am longing now to get out Out of thousands but one strives to attain the Goal And even of those who struggle hard but few attain for the senses are powerful they drag men down

A good world a happy world and social progress are all terms equally intelligible with hot ice or dark light If it were good it would not be the world The soul foolishly thinks of manifesting the Infinite in finite matter Intelligence through gross particles but at last it finds out its error and tries to escape This going back is the beginning of religion and its method destruction of self that is love Not love for wife or child or anybody else but love for every thing else except this little self Never be deluded by the tall talk of which you will hear so much in America about human progress and such stuff There is *no progress* without corresponding digression In one society there is one set of evils in another another So with periods of history In the Middle Ages there were more robbers now more cheats At one period there is less idea of married life at another more prostitution In one more physical agony in another a thousandfold more mental So with knowledge Did not gravitation already exist in nature before it was observed and named? Then what difference does it make to know that it exists? Are you happier than the Red Indians?

The only knowledge that is of any value is to know that all this is humbug But few very few will ever know this Know the Atman alone and give up all other vain words This is the only knowledge we gain from all this knocking about the universe This is the only work to call upon mankind to Awake arise and

stop not till the goal is reached It is renunciation Tyâga that is meant by religion and nothing else

Ishwara is the sum total of individuals yet He Him self also is an individual in the same way as the human body is a unit of which each cell is an individual Samashti or the Collective is God Vyashti or the component is the soul or Jiva The existence of Ishwara therefore depends on that of Jiva as the body on the cell and vice versa Jiva and Ishwara are co existent beings As long as the one exists the other also must Again since in all the higher spheres except on our earth the amount of good is vastly in excess of the amount of bad the sum total or Ishwara may be said to be All good Almighty and Omniscient These are obvious qualities and need no argument to prove from the very fact of totality

Brahman is beyond both of these and is not a state It is the only unit not composed of many units It is the principle which runs through all from a cell to God and without which nothing can exist Whatever is real is that principle or Brahman When I think I am Brahman then I alone exist It is so also when *you* so think and so on Each one is the whole of that principle

A few days ago I felt a sudden irresistible desire to write to Kripananda Perhaps he was unhappy and thinking of me So I wrote him a warm letter Today from the American news I see why it was so I sent him flowers gathered near the glaciers Ask Miss Waldo to send him some money and plenty of love Love never dies The love of the father never dies whatever the children may do or be He is my child He has the same or more share in my love and help now that he is in misery

Yours with blessings
VIVEKANANDA

## LXXXI

### *To Mr E T Sturdy*

GRAND HOTEL SAAS FEE
VALAIS SWITZERLAND
*8th August 1896*

BLESSED AND BELOVED

A large packet of letters came along with yours Herewith I send you the letter written to me by Max Muller It is very kind and good of him

Miss Muller thinks that she will go away very soon to England In that case I will not be able to go to Berne *for that Purity Congress I have promised Only if the* Seviers consent to take me along I will go to Kiel and write to you before The Seviers are good and kind but I have no right to take advantage of their generosity Nor can I take the same of Miss Muller as the expenses there are frightful As such I think it best to give up the Berne Congress as it will come in the middle of September a long way off

I am thinking therefore of going towards Germany ending in Kiel and thence back to England

Bala Gangadhara Tilak (Mr Tilak) is the name and *Orion* that of the book

Yours
VIVEKANANDA

PS There is also one by Jacobi—perhaps translated on the same lines and with the same conclusions

PS I hope you will ask Miss Muller s opinion about the lodgings and the Hall as I am afraid she will be very displeased if she and others are not consulted

V

Miss Muller telegraphed to Prof Deussen last night the reply came this morning 9th August welcoming me

I am to be in Kiel at Deussen s on the 10th September So where will you meet me? At Kiel? Miss Muller goes to England from Switzerland I am going with the Seviers to Kiel I will be there on the 10th September

V

PS I have not fixed yet anything about the lecture I have no time to read The Salem Society most prob ably is a Hindu community and no faddists

V

## LXXXII

*To Mr E T Sturdy*

SWITZERLAND
*12th August 1896*

BLESSED AND BELOVED

Today I received a letter from America which I send to you I have written them that my idea of course is concentration at least for the present beginning I have also suggested them that instead of having too many papers they may start by putting in a few sheets in *The Brahmavadin* written in America and raise the subscription a little which will cover the American expenses Do not know what they will do

We will start from here towards Germany next week Miss Muller goes to England as soon as we have crossed over to Germany

Capt and Mrs Sevier and myself will expect you at Kiel

I haven t yet written anything nor read anything I am indeed taking a good rest Do not be anxious you will have the article ready I had a letter from the Math stating that the other Swami is ready to start He will I am sure be just the man you want He is one of the

best Sanskrit scholars we have and as I hear he has improved his English much I had a number of news paper cuttings from America about Saradananda—I hear from them that he has done very well there America is a good training ground to bring out all that is in a man There is such a sympathy in the air I had letters from Goodwin and Saradananda S sends his love to you and Mrs Sturdy and the baby

With everlasting love and blessings
VIVEKANANDA

## LXXXIII

*To Kripananda (see letter No LXXX)*

SWITZERLAND
*August 1896*

DEAR——

Be you holy and above all sincere and do not for a moment give up your trust in the Lord and you will see the light Whatever is truth will remain for ever what ever is not none can preserve We are helped in being born in a time when everything is quickly searched out Whatever others think or do lower not your standard of purity morality and love of God above all beware of all secret organisations No one who loves God need fear any jugglery Holiness is the highest and divinest power in earth and in heaven Truth alone triumphs not untruth Through truth alone is opened the way to God Do not care for a moment who joins hands with you or not be sure that you touch the hand of the Lord That is enough

I went to the glacier of Monte Rosa yesterday and gathered a few hardy flowers growing almost in the midst of eternal snow I send you one in this letter hoping that

you will attain to a similar spiritual hardihood amidst all the snow and ice of this earthly life

Your dream was very very beautiful In dream our souls read a layer of our mind which we do not read in our waking hours and however unsubstantial imagination may be it is behind the imagination that all unknown psychic truths lie Take heart We will try to do what we can for the good of humanity—the rest depends upon the Lord

Well do not be anxious do not be in a hurry Slow persistent and silent work does everything The Lord is great We will succeed my boy We must Blessed be His name!

Here in America are no Ashramas Would there was one! How would I like it and what an amount of good it would do to this country!

## LXXXIV

*To Mr E T Sturdy*

KIEL

*10th September 1896*

DEAR FRIEND

I have at last seen Prof Deussen the whole of yesterday was spent very nicely with the Professor sight seeing and discussing about the Vedanta

He is what I should call a warring Advaitist No compromise with anything else Ishwara is his bug bear He would have none of it if he could He is very much delighted with the idea of your magazine and wants to confer with you on these subjects in London where he is shortly going

## LXXXV

*To Miss Mary Hale*

AIRLIE LODGE
RIDGEWAY GARDENS
WIMBLEDON ENGLAND
*17th September 1896*

DEAR SISTER

Today I reached London after my two months of climbing and walking and glacier seeing in Switzerland One good it has done me—a few pounds of unnecessary adipose tissue have returned back to the gaseous state Well there is no safety even in that for the solid body of this birth has taken a fancy to outstrip the mind towards infinite expansion If it goes on this way I would have soon to lose all personal identity even in the flesh—at least to all the rest of the world

It is impossible to express my joy in words at the good news contained in Harriet s letter I have written to her today I am sorry I cannot come over to see her married but I will be present in fine body with all good wishes and blessings Well I am expecting such news from you and the other sisters to make my joy complete Now my dear Mary I will tell you a great lesson I have learnt in this life It is this The higher is your ideal the more miserable you are for such a thing as an ideal *cannot* be attained *in the world* or in this life even He who wants perfection in the world is a madman for it cannot be

How can you find the Infinite in the finite? Therefore I tell you Harriet will have a most blessed and happy life because she is not so imaginative and sentimental as to make a fool of herself She has enough of sentiment as to make life sweet and enough of common sense and gentleness as to soften the hard points in

life which must come to everyone So has Harriet McKindley in a still higher degree She is just the girl to make the best of wives only this world is so full of idiots that very few can penetrate beyond the flesh! As for you and Isabelle I will tell you the truth and my language is plain

You Mary are like a mettlesome Arab—grand splendid You will make a splendid queen—physically mentally You will shine alongside of a dashing bold adventurous heroic husband but my dear sister you will make one of the worst of wives You will take the life out of our easy going practical plodding husbands of the everyday world Mind my sister although it is true that there is more romance in actual life than in any novel yet it is few and far between Therefore my advice to you is that until you bring down your ideals to a more practical level you ought not to marry If you do the result will be misery for both of you In a few months you will lose all regard for a commonplace good nice young man and then life will become insipid As to sister Isabelle she has the same temperament as you only this kindergarten has taught her a good lesson of patience and forbearance Perhaps she will make a good wife

There are two sorts of persons in the world The one—strong nerved quiet yielding to nature not given to much imagination yet good kind sweet etc For such is this world they alone are born to be happy There are others again with high strung nerves tremendously imaginative with intense feeling always going high one moment and coming down the next For them there is no happiness The first class will have almost an even tenor of happiness the last will have to run between ecstasy and misery But of these alone what we call geniuses are made There is some truth in the recent theory that genius is a sort of madness

Now persons of this class if they want to be great they must fight to finish—clear out the deck for battle No encumbrance—no marriage no children no undue attachment to anything except the one *idea* and live and die for that I am a person of this sort I have taken up the one idea of Vedanta and I have cleared the deck for action You and Isabelle are made of this metal but let me tell you though it is hard *you are spoiling your lives in vain* Either take up one *idea* clear the deck and to it dedicate the life or be contented and practical lower the ideal marry and have a *happy life* Either Bhoga or Yoga —either enjoy this life or give up and be a Yogi *none can have both in one* Now or never select quick He who is very particular gets nothing says the proverb Now sincerely and really and for ever determine to clear the deck for fight take up anything philosophy or science or religion or literature and let that be your God for the rest of your life Achieve happiness or achieve greatness I have no sympathy with you and Isabelle you are neither for this nor for that I wish to see you happy as Harriet has well chosen or *great* Eating drinking dressing and society nonsense are not things to throw a life upon—especially you Mary You are rusting away a splendid brain and abilities for which there is not the least excuse You must have ambition to be great I know you will take these rather harsh remarks from me in the right spirit knowing I like you really as much or more than what I call you my sisters I had long had a mind to tell you this and as experience is gathering I feel like telling you The joyful news from Harriet urged me to tell you this I will be overjoyed to hear that you are married also and happy so far as happiness can be had here or would like to hear of you as doing great deeds

I had a pleasant visit with Prof Deussen in Germany I am sure you have heard of him as the greatest

German philosopher He and I travelled together to England and today came together to see my friend here with whom I am to stop for the rest of my stay in England He is very fond of talking Sanskrit and is the only Sanskrit scholar in the West who can talk in it As he wants to get a practice he never talks to me in any other language but Sanskrit

I have come over here amongst my friends shall work for a few weeks and then go back to India in the winter

Ever your loving brother

VIVEKANANDA

## LXXXVI

*To Miss Josephine MacLeod*

THE GREY COAT GARDENS
WESTMINSTER S W
LONDON
*3rd December 1896*

DEAR JOE

Many many thanks dear Joe Joe for your kind invitation but the Dear God has disposed it this way viz I am to start for India on the 16th with Captain and Mrs Sevier and Mr Goodwin The Seviers and myself take steamer at Naples And as there will be four days at Rome I will look in to say good bye to Alberta

Things are in a hum here just now the big hall for the class 39 Victoria is full and yet more are coming

Well the good old country now calls me I must go So good bye to all projects of visiting Russia this April

I just set things a going a little in India and am off again for the ever beautiful U S and England etc

So very kind of you to send Mabel s letter—goo news indeed Only I am a little sorry for poor Fox However Mabel escaped him that is better

You did not write anything about how things ar going on in New York I hope it is all well there Poo Cola! is he able now to make a living?

The coming of Goodwin was very opportune as captured the lectures here which are being published i a periodical form Already there have been subscribe enough to cover the expenses

Three lectures next week and my London work i finished for this season Of course everybody here think it foolish to give it up just now the boom is on bu the Dear Lord says Start for Old India I obey

To Frankincense to Mother to Holister and every one else my eternal love and blessings and with the sam for you

Yours ever sincerel

VIVEKANAND

## LXXXVII

*To Swami Brahmananda*

HOTEL MINERVA FLORENC
*20 December 1896*

DEAR RAKHAL

As you see by this time I am on my way Befor leaving London I got your letter and the pamphlet Tak no heed of M— s madness He surely has gone craz with jealousy Such foul language as he has used woul only make people laugh at him in a civilised countr He has defeated his purpose by the use of such vulg words

All the same we ought not to allow Hara Moha or any one else to go and fight B—and others in ou

name The public must know that we have no quarrel with any sect and if anybody provokes a quarrel he is doing it on his own responsibility Quarrelling and abusing each other are our national traits Lazy useless vulgar jealous cowardly and quarrelsome that is what we are Bengalis Any one who wants to be my friend must give up these Neither do you allow Hara Mohan to print any book because such printing as he does is only cheating the public

If there are oranges in Calcutta send a hundred to Madras care of Alasinga so that I may have them when I reach Madras

Mazumder writes that the Sayings of Shri Ramakrishna published in *The Brahmavadin* are not genuine and are lies! In that case ask Suresh Dutt and Ram Babu to give him the lie in *The Indian Mirror* As I did not do anything about the collection of the Uktis (Sayings) I cannot say anything

Yours affectionately
VIVEKANANDA

PS Don t mind these fools No fool like an old fool is the proverb Let them bark a little Their occupation is gone Poor souls! Let them have a little satisfaction in barking

## LXXXVIII

*To Miss Mary Hale*

DAMPFER PRINZ REGENT LEOPOLD
*3rd January 1897*

DEAR MARY

I received your letter forwarded from London in Rome It was very very kind of you to write such a

beautiful letter and I enjoyed every bit of it I do not know anything about the evolution of the orchestra in Europe We are nearing Port Said after four days of frightfully bad sailing from Naples The ship is rolling as hard as she can and you must pardon my scrawls under such circumstances

From Suez begins Asia Once more Asia What am I? Asiatic European or American? I feel a curious medley of personalities in me You didn t write anything about Dharmapala his goings and doings I am much more interested in him than in Gandhi

I land in a few days at Colombo and mean to do Ceylon a bit There was a time when Ceylon had more than 20 million inhabitants and a huge capital of which the ruins cover nearly a hundred square miles!

The Ceylonese are not Dravidians but pure Aryans It was colonised from Bengal about 800 B C and they have kept a very clear history of their country from that time It was the greatest trade centre of the ancient world and Anuradhapura was the London of the ancients

I enjoyed Rome more than anything in the West and after seeing Pompeii I have lost all regard for the so called Modern Civilisation With the exception of steam and electricity they had everything else and infinitely more art conceptions and executions than the Moderns

Please tell Miss Locke that I was mistaken when I told her that sculpturing of the human figure was not developed in India as among the Greeks I am reading in Fergusson and other authorities that in Orissa or Jagannath which I did not visit there are among the ruins human figures which for beauty and anatomical skill would compare with any production of the Greeks There is a colossal figure of Death a huge female skeleton covered with a shrivelled skin—the awful fidelity to anatomical

details are frightening and disgusting Says my author one of the female figures in the niche is exactly like the Venus de Medici and so on But you must remember that everything almost has been destroyed by the iconoclastic Mohammedan yet the remnants are more than all European debris put together! I have travelled eight years and not seen many of the masterpieces

Tell Sister Locke also that there is a ruined temple in a forest in India which and the Parthenon of Greece Fergusson considers as the climax of architectural art—each of its type—the one of conception the other of conception and detail The later Mogul buildings etc the Indo Saracenic architecture does not compare a bit with the best types of the ancients

With all my love
VIVEKANANDA

PS Just by chance saw Mother Church and Father Pope at Florence You know of it already

V

## LXXXIX

*To Swami Brahmananda*

MADRAS
*12th February 1897*

DEAR RAKHAL

I am to start by *S S Mombasa* next Sunday I had to give up invitations from Poona and other places on account of bad health I am very much pulled down by hard work and heat

The T— and others wanted to intimidate me Therefore I had to give them a bit of my mind You know they persecuted me all the time in America because I did not join them They wanted to begin it

here So I had to clear my position If that displeases any of my Calcutta friends God help them You need not be afraid I do not work alone but He is always with me What could I do otherwise?

Yours
VIVEKANANDA

PS Take the house if furnished —V

## XC*

*To Swami Ramakrishnananda*

DARJEELING
*20th April, 1897*

DEAR SHASHI

All of you have doubtless reached Madras by this time I should think Biligiri is certainly taking great care of you and that Sadananda serves you as your attendant In Madras the worship should be done in a completely Sâttvic manner without a trace of Rajas in it I hope Alasinga has by now returned to Madras Don t enter into wrangles with anybody—always maintain a calm attitude For the present let the worship of Shri Rama krishna be established and continued in the house of Biligiri But see that the worship does not become very elaborate and long Time thus saved should be utilised in holding classes and doing some preaching It is good to initiate as many as you can Supervise the work of the two papers and help in whatever way you can Biligiri has two widowed daughters Kindly educate them and make special efforts that through them more such widowed women get a thorough grounding in their own religion and learn a little English and Sanskrit But all this work should be done from a distance One has to be exceedingly careful before young women Once you fall there is no way out and the sin is unpardonable

I am very sorry to hear that Gupta was bitten by a dog but I hear that the dog was not a mad one so there is no cause for alarm In any case see that he takes the medicine sent by Gangadhar

Early morning finish daily your worship and other duties briefly and calling together Bilgiri with his family read before them the Gita and other sacred books There is not the least necessity for teaching the divine Love of Râdhâ and Krishna Teach them pure devotion to Sitâ Râm and Hara Pârvati See that no mistake is made in this respect Remember that the episodes of the divine relationship between Radha and Krishna are quite unsuitable for young minds Specially Bilgiri and other followers of Ramanujacharya are worshippers of Rama so see to it that their innate attitude of pure devotion is never disturbed

In the evenings give some spiritual teaching like that to the general public Thus gradually even the moun tain is crossed

See that an atmosphere of perfect purity is always maintained and that there enters not the slightest trace of Vâmâchâra For the rest the Lord Himself will guide you there is no fear Give to Bilgiri my respectful salutations and loving greetings and convey my salutations to similar devotees

My illness is now much less—it may even be cured completely if the Lord wills My love blessings and greetings to you

Yours affectionately
VIVEKANANDA

PS Please tender my specially affectionate greet ings and blessings to Dr Nanjunda Rao and help him as much as you can Try your best to particularly encourage the study of Sanskrit among the non Brahmins

V

XCI
*To Sister Nivedita*

ALAMBAZAR MATH
CALCUTTA
*5th May 1897*

MY DEAR MISS NOBLE

Your very very kind loving and encouraging letter gave me more strength than you think of

There are moments when one feels entirely des pondent no doubt—especially when one has worked towards an ideal during a whole life s time and just when there is a bit of hope of seeing it partially accomplished there comes a tremendous thwarting blow I do not care for the disease but what depresses me is that my ideals have not had yet the least opportunity of being worked out And you know the difficulty is money

The Hindus are making processions and all that but they cannot give money The only help I got in the world was in England from Miss M and Mr S I thought there that a thousand pounds was sufficient to start at least the principal centre in Calcutta but my calculation was from the experience of Calcutta ten or twelve years ago Since then the prices have gone up three or four times

The work has been started anyhow A rickety old little house has been rented for six or seven shillings where about twenty four young men are being trained I had to go to Darjeeling for a month to recover my health and I am glad to tell you I am very much better and would you believe it without taking any medicine only by the exercise of mental healing? I am going again to another hill station tomorrow as it is very hot in the plains Your society is still living I am sure I will send you a report at least every month of the work done here The London work is not doing well at all I '

and that was the main reason why I would not come to England just now although some of our Râjas going for the Jubilee tried their best to get me with them as I would have to work hard again to revive the interest in Vedanta And that would mean a good deal more trouble physically

I may come over for a month or so very soon how ever Only if I could see my work started here how gladly and freely would I travel about

So far about work Now about you personally Such love and faith and devotion and appreciation like yours dear Miss Noble repays a hundred times over any amount of labour one undergoes in this life May all blessings be yours My whole life is at your service as we may say in our mother tongue

It never was and never will be anything but very very welcome any letters from you and other friends in England Mr and Mrs Hammond wrote two very kind and nice letters and Mr Hammond a beautiful poem in *The Brahmavadin* although I did not deserve it a bit I will write to you again from the Himalayas where thought will be clear in sight of the snows and the nerves more settled than in this burning plains Miss Muller is already in Almora Mr and Mrs Sevier go to Simla They have been in Darjeeling so long So things come and go dear friend Only the Lord is unchangeable and He is Love May He make your heart His eternal habitation is the constant prayer of

VIVEKANANDA

## XCII*

*To Swami Brahmananda*

ALMORA
*20th May 1897*

MY DEAR RAKHAL

From your letter I got all the important news I got

a letter from Sudhir also and also one from Master Mahashay I have also got two letters from Nityananda (Yogen Chatterjee) from the famine areas

Even now money is floating on the waters as it were but it will surely come When it comes buildings land and a permanent fund—everything will come all right But one can never rest assured until the chickens are hatched and I am not now going down to the hot plains within two or three months After that I shall make a tour and shall certainly secure some money This being so if you think that the [land with a] frontage of eight Kâthâs cannot be acquired there is no harm in paying the earnest money to the middle man vendor as though you were losing it for nothing In all these matters use your own discretion I cannot give any further advice There is particularly a chance of making mistake through hurry Tell Master Mahashay that I quite approve of what he had said

Write to Gangadhar that if he finds it difficult to get alms etc there he should feed himself by spending from his own pocket and that he should publish a weekly letter in Upen s paper (*The Vasumati*) In that case others also may help

I understand from a letter of Shashi he wants Nirbhayananda If you think this course to be the best then send Nirbhayananda and bring back Gupta Send Sashi a copy of the Bengali Rules and Regulations of the Math or an English version of it and write to him to see that the work there is done in accordance with the Rules and Regulations

I am glad to learn that the Association in Calcutta is going on nicely It does not matter if one or two keep out Gradually everyone will come Be friendly and sympathetic with everybody Sweet words are heard afar it is particularly necessary to try and make new people come We want more and more new members

Yogen is doing well On account of the great heat in Almora I am now in an excellent garden twenty miles from there This place is comparatively cooler but still warm The heat does not seem to be particularly less than that of Calcutta

The feverishness is all gone I am trying to go to a still cooler place Heat or the fatigue of walking I find at once produces trouble of the liver The air here is so dry that there is a burning sensation in the nose all the time and the tongue becomes as it were a chip of wood Don t criticise any more otherwise I would have happily gone to a colder place by this time con stantly neglects diet restrictions —what rot do you talk? Do you really listen to the words of these fools? It is just like your not allowing me to take Kalâi-dâl (black pulses) because it contains starch! And what is more—there will be no starch if rice and Roti (bread) are eaten after frying them? What wonderful knowledge my dear The fact of the matter is my old nature is coming back—this I am seeing clearly In this part of the country now all illness takes on the colour and fashion of this locality and in that part of the country it takes on the colour and fashion of the illnesses in that locality I am thinking of making my meals at night very light I shall eat to the full in the morning and at noon at night milk fruits etc That is why I am staying in this orchard in expectation of fruits! Don t you see?

Now don t be alarmed Does a companion of Shiva die so quickly? Just now the evening lamp has been lighted and singing has to be done throughout the whole night Nowadays my temper also is not very irritable and feverishness is all due to the liver—I see this clearly Well I shall make that also come under control—what fear? Bravely brace yourself up and do work let us create a mighty commotion

Tender my love to all at the Math At the next

meeting of the Association give my greetings to everybody and tell them that though I am not physically present there yet my spirit is where the name of our Lord is sung—"यावत्तव कथा राम सञ्चरिष्यति मद्रिनीम्', that is O Rama so long as the story of your life goes the round on the earth —because you see the Atman is omnipresent

Yours affectionately
VIVEKANANDA

## XCIII

ALMORA
*20th May 1897*

DEAR MOHIM

Your letter gave me much pleasure One thing perhaps I forget to tell you—to keep a copy of the letter you sent me Also all important communications to the Math from different persons and to different persons should be copied and preserved

I am very glad to learn that things are going on well that the work there is steadily progressing as well as that of Calcutta

I am all right now except for the fatigue of the travel which I am sure will go off in a few days

My love and blessings to you all

Yours
VIVEKANANDA

## XCIV

*To Marie Halboister*

ALMORA
*2nd June 1897*

DEAR MARIE

I begin here my promised big chatty letter with the best intention as to its growth and if it fails it will be

owing to your own Karma I am sure you are enjoying splendid health I have been very very bad indeed now recovering a bit—hope to recover very soon

What about the work in London? I am afraid it is going to pieces Do you now and then visit London? Hasn t Sturdy got a new baby?

The plains of India are blazing now I cannot bear it So I am here in this hill station—a bit cooler than the plains

I am living in a beautiful garden belonging to a merchant of Almora—a garden abutting several miles of mountains and forests Night before last a leopard came here and took away a goat from the flock kept in this garden It was a frightful din the servants made and the barking of the big Tibet watchdogs These dogs are kept chained at a distance all night since I am here so that they may not disturb my sleep with their deep barks The leopard thus found his opportunity and got a decent meal perhaps after weeks May it do much good to him!

Do you remember Miss Muller? She has come here for a few days and was rather frightened when she heard of the leopard incident The demand for tanned skins in London seems very great and that is playing havoc with our leopards and tigers more than anything else

As I am writing to you before me reflecting the afternoon s glow stand long long lines of huge snow peaks They are about twenty miles as the crow flies from here and forty through the circuitous mountain roads

I hope your translations have been well received in the Countess s paper I had a great mind and very good opportunity of coming over to England this Jubilee season with some of our Princes but my physicians would not allow me to venture into work so soon For going to Europe means work isn t it? No work no bread

Here the yellow cloth is sufficient and I would have food enough Anyhow I am taking a much desired rest hope it will do me good

How are you going on with your work? With joy or sorrow? Don t you like to have a good rest say for some years and no work? Sleep eat and exercise exercise eat and sleep— that is what I am going to do some months yet Mr Goodwin is with me You ought to have seen him in his Indian clothes I am very soon going to shave his head and make a full blown monk of him

Are you still practising some of the Yogas? Do you find any benefit from them? I learn that Mr Martin is dead How is Mrs Martin—do you see her now and then?

Do you know Miss Noble? Do you ever see her? Here my letter comes to an end as a huge dust storm is blowing over me and it is impossible to write It is all your Karma dear Marie for I intended to write so many wonderful things and tell you such fine stories but I will have to keep them for the future and you will have to wait

Ever yours in the Lord
VIVEKANANDA

## XCV

*To Sister Nivedita*

ALMORA
*20th June 1897*

MY DEAR MISS NOBLE

Let me tell you plainly Every word you wr
I value and every letter is welcome a hundred

the Lord always bless you I appreciate you every day more and more from a distance Kindly convey my love everlasting to —— and all the rest of our friends there

With all love yours ever in the Truth
VIVEKANANDA

## XCVII

*To Miss Josephine MacLeod*

ALMORA
*10th July 1897*

MY DEAR JOE JOE

I am glad to learn that you have at last found out that I have time to read your letters

I have taken to the Himalayas tired of lecturing and orating I am so sorry the doctors would not allow my going over with the Raja of Khetri to England and that has made Sturdy mad

The Seviers are at Simla and Miss Müller here in Almora

The plague has subsided but the famine is still here and as it looks (on account of no rain as yet) it may wear yet a terrible aspect

I am very busy from here directing work by my boys in some of the famine districts

Do come by all means only you must remember this The Europeans and the Hindus (called Natives by the Europeans) live as oil and water Mixing with Natives is damning to the Europeans

There are no good hotels to speak of even at the capitals You will have to travel with a number of servants about you (cost cheaper than hotels) You will have to bear with people who wear only a loin cloth

you will see me with only a loin cloth about me Dirt and filth everywhere and brown people But you will have plenty of men to talk to you philosophy If you mix with the English much here you will have more comforts but see nothing of the Hindus as they are Possibly I will not be able to eat with you but I promise that I will travel to good many places with you and do everything in my power to make your journey pleasant These are what you expect if anything good comes so much the better Perhaps Mary Hale may come over with you There is a young lady Miss Campbell Orchard Lake Orchard Island Michigan who is a great worshipper of Krishna and lives alone in that Island fasting and praying She will give anything to be able to see India once but she is awfully poor If you bring her with you I will anyhow manage to pay her expenses If Mrs Bull brings old Landsberg with her that will be saving that fool s life as it were

Most probably I may accompany you back to America Kiss Holister for me and the baby My love to Alberta to the Leggetts and to Mabel What is Fox doing? Give him my love when you see him To Mrs Bull and S Saradananda my love I am as strong as ever but it all depends upon leading a quiet life ever afterwards No hurly burly any more

I had a great mind to go to Tibet this year but they would not allow me as the road is dreadfully fatiguing However I content myself with galloping hard over precipices on mountain ponies (This is more exciting than your bicycle even although I had an experience of that at Wimbledon) Miles and miles of uphill and miles and miles of downhill the road a few feet broad hanging over sheer precipices several thousand feet deep below

Ever yours in the Lord
VIVEKANANDA

PS The best time to come is to arrive in India by October or beginning of November December January and February you see things all over and then start by the end of February From March it begins to get hot Southern India is *always hot* V

Goodwin has gone to work in Madras on a paper to be started there soon V

## XCVIII*

*To Swami Brahmananda*

DEULDHAR ALMORA
*13th July 1897*

MY DEAR RAKHAL

Going to Almora from here I made special efforts for Yogen But he left for the plains as soon as he had recovered a little From Subhala valley he will write to me of his safe arrival there As it is impossible to procure a Dandi (a carrying chair) or any other conveyance Latu could not go Achyut and myself have again come back to this place Today my health is a little bad owing to this riding on horseback at breakneck speed in the sun I took Shashi Babu s medicine for two weeks—I find no special benefit The pain in the liver is gone and owing to plenty of exercise my hands and legs have become muscular but the abdomen is distending very much I feel suffocated while getting up or sitting down Perhaps this is due to the taking of milk Ask Shashi if I can give up milk Previously I suffered from two attacks of sunstroke From that time my eyes become red if I expose myself to the sun and the health continues to be bad for two or three days at a stretch

I was very pleased to know all the news from the Math and I also heard that the famine relief work is

*going on well* *Please let me know if any money has* been received from the office of the *Brahmavadin* for famine relief Some money will be sent soon from here also There is famine in many other places also so it is not necessary to stay so long in one place Tell them to go to other localities and write to each man to go to a separate place All such work is real work If the field is made ready in this way the seeds of spiritual knowledge can be sown Remember this always— that the only answer to those conservative fanatics who abuse us is such work I have no objection to get the thing printed as Shashi and Sarada are suggesting

You yourselves come to a decision as to what the name of the Math should be The money will come within seven weeks but I have no further news about the land In this matter it seems to me that it will be good if we can get the garden of Kristo Gopal in Cossipore [1] What do you say? In future great works will be accomplished If you agree with me don t let this matter out to anybody either within the Math or outside but quietly make enquiries The work is spoiled if plans are not kept secret If it can be bought within fifteen or sixteen thousand then buy at once—of course only if you think it good If something more is demanded make some advance payment and wait for those seven weeks My view is that for the present it is better to buy it Everything else will come by and by All our associations centre round that garden In reality that is our first Math Let the thing be done very privately

A work can be judged by its results only just as one can infer the nature of previous mental tendencies by *their resultant in present behaviour*

Undoubtedly the price of the land of the garden at *Cossipore has increased but our purse has on the other*

[1] Whe e Shri Ramakri hna pas ed his last days

hand thinned Do something or other but do it quickly All work is spoilt by dilatoriness This garden also has to be acquired—if not today tomorrow however big the Math on the banks of the Ganges may be It will be still better if you can broach the subject through a proxy If they hear that we are willing to buy they will bid high Do the work very confidentially Be fearless Shri Rama krishna is our helper what fear? Give my love to all

Yours affectionately
VIVEKANANDA

PS (on the cover) Make special efforts for Cossipore Give up the land at Belur Should the poor[1] die of starvation while you people at the top are indulging in controversy regarding to whom the credit should go? If Mahabodhi takes all the credit let it Let the poor be benefited That the work is going on well is good news Work on with greater energy I am beginning to send articles The saccharine and lime have reached V

## IC

### To Marie Halboister

ALMORA
*25th July 1897*

MY DEAR MARIE

I have time will and opportunity now to clear my promise So my letter begins I have been very weak for some time and with that and other things my visit to England this Jubilee season had to be postponed

I was very sorry at first not to be able to meet my nice

[1] The famine stricken people for whom the Mah Bodhi Society agreed to pay on cond tion that the work would be done in its name

and very dear friends once more but Karma cannot be avoided and I had to rest contented with my Himalayas It is a sorry exchange after all for the beauty of the living spirit shining through the human face is far more pleasurable than any amount of material beauty

Is not the soul the Light of the world?

The work in London had to go slow—for various reasons and last though not the least was *l argent mon amie*! When I am there *l argent* comes in somehow to keep the mare going Now everybody shrugs his shoulder I must come again and try my best to revive the work

I am having a good deal of riding and exercise but I had to drink a lot of skimmed milk per prescription of the doctors with the result that I am more to the front than back! I am always a forward man though—but do not want to be too prominent just now and I have given up drinking milk

I am glad to learn that you are eating your meals with good appetite

Do you know Miss Margaret Noble of Wimbledon? She is working hard for me Do correspond with her if you can and you can help me a good deal there Her address is Brantwood Worple Road Wimbledon

So you saw my little friend Miss Orchard and you liked her too—good I have great hopes for her And how I should like to be retired from life s activities entirely when I am very old and hear the world ringing with the names of my dear dear young friends like yourself and Miss Orchard etc !

By the by I am glad to find that I am aging fast my hair is turning grey Silver threads among the gold —I mean black—are coming in fast

It is bad for a preacher to be young don t you think so? I do as I did all my life People have more con fidence in an old man and it looks more venerable Yet the old rogues are the worst rogues in the world isn t it?

The world has its code of judgment which alas is very different from that of truth s

So your Universal Religion has been rejected by the *Revue de deux Mondes* Never mind try again some other paper Once the ice is broken you get in at a quick rate I am sure And I am so glad that you love the work it will make its way I have no doubt of it Our ideas have a future *ma chere* Marie—and it will be realised soon

I think this letter will meet you in Paris—your beautiful Paris—and I hope you will write me lots about French journalism and the coming World s Fair there

I am so glad that you have been helped by Vedanta and Yoga I am unfortunately sometimes like the circus clown who made others laugh himself miserable!!

You are naturally of a buoyant temperament Nothing seems to touch you And you are moreover a very prudent girl inasmuch as you have scrupulously kept yourself away from love and all its nonsense So you see you have made your good Karma and planted the seed of your lifelong well being Our difficulty in life is that we are guided by the present and not by the future What gives us a little pleasure now drags us on to follow it with the result that we always buy a mass of pain in the future for a little pleasure in the present

I wish I had nobody to love and I were an orphan in my childhood The greatest misery in my life has been my own people—my brothers and sisters and mother etc Relatives are like deadly clogs to one s progress and is it not a wonder that people will still go on to find new ones by *marriage*!!!

He who is alone is happy Do good to all like everyone but *do not love* any one It is a bondage and bondage brings only misery Live alone in your mind—that is happiness To have nobody to care for and never minding who cares for one is the way to be free

I envy so much your frame of mind—quiet gentle light yet deep and *free* You are already free Marie free already You are Jivanmukta I am more of a woman than a man you are more of a man than woman I am always dragging other s pain into me—for nothing without being able to do any good to anybody—just as women if they have no children bestow all their love upon a cat ! ! !

Do you think this has any spirituality in it? Nonsense it is all material *nervous bondage*—that is what it is O ! to get rid of the thraldom of the flesh ! !

Your friend Mrs Martin very kindly sends me copies of her magazine every month—but Sturdy s thermometer is now below zero it seems He seems to be greatly dis appointed with my non arrival in England this summer What could I do?

We have started two Maths here one in Calcutta the other in Madras The Calcutta Math (a wretched rented house) was awfully shaken in the late earthquake

We have got in a number of boys and they are in training also we have opened famine relief in several places and the work is going on apace We will try to start similar centres in different places in India

In a few days I am going down to the plains and from thence go to the Western parts of the mountains When it is cooler in the plains I will make a lecture tour all over and see what work can be done

Here I cannot find any more time to write—so many people are waiting—so here I stop dear Marie wishing you all joy and happiness

May you never be lured by flesh is the constant prayer of—

Ever yours in the Lord

VIVEKANANDA

C*

*To Swami Ramakrishnananda*

ALMORA
*29th July 1897*

DEAR SHASHI

I got information that your work there is going on very well Get a thorough mastery of the three Bhâshyas (commentaries) and also study well European philosophy and allied subjects—see to it without fail To fight with others one requires sword and shield—this fact should never be forgotten I hope Sukul has now reached there and is attending on you all right If Sadananda does not like to stay there send him to Calcutta Don t forget to send to the Math every week a report of the work including income and expenditure and other information

Alasinga s sister s husband borrowed four hundred rupees from Badridas here promising to send it back as soon as he reached Madras inquire from Alasinga and tell him to send it quickly For I am leaving this place the day after tomorrow—whether for Mussoorie Hills or somewhere else I shall decide later

Yesterday I delivered a lecture in the circle of the local English people and all were highly pleased with it But I was very much pleased with the lecture in Hindi that I delivered the previous day—I did not know before that I could be oratorical in Hindi

Are there any new boys joining the Math? If so then carry on the work in the same manner as it is being done in Calcutta At present don t use up your wisdom too much lest it should become completely exhausted—you can do that later on

Pay particular attention to your health but too much coddling of the body will on the contrary also spoil the

health If there is not the strength of knowledge nobody will care a tuppence for your ringing of the bell—this is certain and knowing this for certain equip yourself accordingly My heart s love and blessings to you and to Goodwin and others

Yours affectionately
VIVEKANANDA

## CI*

*To Swami Ramakrishnananda*

AMBALA
*19th August 1897*

DEAR SHASHI

I am very much pained to hear that the work in Madras is not prospering for want of funds I am glad to learn that the amount borrowed by Alasinga s brother in law (sister s husband) has been received back in Almora Goodwin has written to me to inform the Reception Committee to take some money for expenses from the amount that is left as a result of the lecture It is a very mean thing to spend the money received on the occasion of that lecture for the purpose of the Reception —and I do not like to tell anybody anything about this matter I have understood quite well what the people of our country are when it comes to money matters On my behalf you personally talk with the friends there and politely make them understand that it is all right if they can find ways and means to bear the expenses but if they cannot do so all of you come back to the Math at Calcutta or go to Ramnad and establish the Math there

I am now going to the hills at Dharamsala Niranjan Dinu Krishnalal Latu and Achyut will stay at Amritsar Why did you not all these days send Sadananda to the

Math? If he is still there then send him to the Punjab on receipt of a letter from Niranjan from Amritsar I intend to start work in the Punjab after a few days more rest in the Punjab hills The Punjab and Rajputana are indeed fields for work I shall write to you again soon after starting work

My health was very bad recently Now I am very slowly recovering It will be all right if I stay in the hills for some more days My love to you and to Alasinga G G R A Goodwin Gupta Sukul and all others

Yours affectionately
VIVEKANANDA

## CII*

*To Swami Brahmananda*

AMRITSAR
*2nd September 1897*

MY DEAR RAKHAL

Yogen tells me in a letter to buy the house at Baghbazar for Rs 20 000 Even if we buy that house there are still a lot of difficulties for example we shall have to break it down in part and make the drawing room into a big hall and similar alterations and repairs *Moreover the house is very old and ramshackle* However consult Girish Babu and Atul and do what you decide to be best Today I am leaving by the two o clock train with all my party for Kashmir The recent stay at Dharamsala Hills has improved my health much and the tonsilitis fever etc have completely disappeared

From a letter of yours I got all the news Niranjan Latu Krishnalal Dinanath Gupta and Achyut are all going to Kashmir with me

The gentleman from Madras who donated Rs 1 500 for famine relief wants an account of how exactly the money was expended Send him such an account We are doing more or less well

Yours affectionately
VIVEKANANDA

PS Give my love to all at the Math

V

## CIII*

*To Swami Brahmananda*

C/o RISHIBAR MUKHOPADHYAYA
CHIEF JUSTICE
SRINAGAR KASHMIR
*13th September 1897*

MY DEAR RAKHAL

Now Kashmir The excellent accounts you heard of this place are all true There is no place so beautiful as this and the people also are fair and good looking though their eyes are not beautiful But I have also never seen elsewhere villages and towns so horribly dirty In Srinagar I am now putting up at the house of Rishibar Babu He is very hospitable and kind Send all my letters to his address In a few days I shall go out somewhere else on excursions but while returning I shall come by way of Srinagar and so shall get the letters also I have read the letter that you sent regarding Gangadhar Write to him that there are many orphans in Central India and in Gorakhpur From there the Punjabis are getting many children You must persuade

Mahendra Babu and get up an agitation about this matter so that the people of Calcutta are induced to take up the charge of these orphans—such a movement is very desirable Especially a memorial should be sent to the Government requesting it to see that orphans taken over by the missionaries are returned to the Hindus Tell Gangadhar to come over and on behalf of the Ramakrishna Society a tearing campaign should be made Gird up your loins and go to every house to carry on the campaign Hold mass meetings etc Whether you succeed or not start a furious agitation Get all the facts from the important Bengali friends at Gorakhpur by writing to them and let there be a country wide agitation over this Let the Ramakrishna Society be fully established The secret of the whole thing is to agitate and agitate without respite I am much pleased to see the orderliness of Sarada s work Gangadhar and Sarada should not rest satisfied until they have succeeded in creating a centre in every place they visit

Just now I received a letter from Gangadhar It is good news that he is determined to start a centre in that district Write to him saying that his friend the Magistrate has sent an excellent reply to my letter As soon as we come down to the plains from Kashmir I shall send back Latu Niranjan Dinu and Khoka For there is no suitable work for them here any more also within three to four weeks send Shuddhananda Sushil and one other to me Send them to the house of Mr Shyamacharan Mukhopadhyaya Medical Hall Cantonment Ambala From there I shall go to Lahore They should have each two thick gerua coloured jerseys and two blankets for bedding I shall buy them woollen *chaddars* and other woollen necessities in Lahore If the translation of *Raja Yoga* has been completed get it published bearing all the cost Where the language is obscure make it very simple and clear and let Tulsi make a

Hindi translation of it if he can If these books are published they will help the Math very greatly

I hope your health is now quite all right Since reaching Dharamsala I have been all right I like the cold places there the body keeps well I have a desire either to visit a few places in Kashmir and then choose an excellent site and live a quiet life there or to go on floating on the water I shall do what the doctor advises The Raja is not here now His brother the one just next to him in age is the Commander in Chief Efforts are being made to arrange a lecture under his chairman ship I shall write all about this afterwards If the meeting for the lecture is held in a day or two I shall stay back otherwise I go out again on my travels Sevier is still at Murree His health is very bad—going about in the jolting *tongas* and *jutkas* The Bengali gentlemen of Murree are very good and courteous Give my respects to G C Ghosh Atul Master Mahashay and others and keep up the spirits of everybody What is the news about the house which Yogen suggested we should buy? In October I shall go down from here and shall deliver a few lectures in the Punjab After that I may go via Sind to Cutch Bhuj and Kathiawar—even down to Poona if circumstances are favourable other wise I go to Rajputana via Baroda From Rajputana I go to the North Western Province [1] then Nepal and finally Calcutta—this is my present programme Every thing however is in God s hands My love and greetings to all

Yours affectionately
VIVEKANANDA

In those days this was made up of Uttar Pradesh and part of the Punjab

CIV

*To Swami Shuddhananda*

C/o RISHIBAR MUKHOPADHYAYA
CHIEF JUSTICE
SRINAGAR KASHMIR
*15th September 1897*

MY DEAR SHUDDHANANDA

We are in Kashmir at last I need not tell you of all the beauties of the place It is the one land fit for Yogis to my mind But the land is now inhabited by a race who though possessing great physical beauty are extremely dirty I am going to travel by water for a month seeing the sights and getting strong But the city is very malarious just now and Sadananda and Kristolal have got fever Sadananda is all right today but Kristolal has fever yet The doctor came today and gave him a purgative He will be all right by tomorrow we hope and we start also tomorrow The State has lent me one of its barges and it is fine and quite comfortable They have also sent orders to the Tahsildars of different districts The people here are crowding in bands to see us and are doing everything they can to make us comfortable

A clipping from *The Indian Mirror* quoting passages from an article written by Dr Barrows in an American paper has been sent over to me by somebody without a name and asking me what reply to give I send back the cutting to Brahmananda with my answer to the passages which are damned lies !

I am glad to learn you are doing well there and going on with your usual work I also had a letter from Shivananda giving the details of work there

After a month I go back to the Punjab and I will

expect three of you at Ambala In case a centre is founded one of you will be left in charge Niranjan Latu and Kristolal will be sent back

I intend to make a rapid march through the Punjab and Sind via Kathiawar and Baroda back to Rajputana and thence to Nepal and last Calcutta

Write to me C/o Rishibar Babu at Srinagar I will get the letter on my way back

With love to all and blessings

Yours
VIVEKANANDA

## CV*

*To Sri Haripada Mitra*

SRINAGAR KASHMIR
*1897*

DEAR HARIPADA

*My health has been very bad for the last nine months and the heat made it still worse So I have been wander*ing over the hills from place to place Now I am in Kashmir I have travelled far and wide but I have never seen such a country I shall soon leave for the Punjab and again go to work From Sadananda I have heard all the news about you and continue to get it I am sure to go to Karachi after visiting the Punjab so we shall meet in person there

With blessings
VIVEKANANDA

## CVI

*To Miss Josephine MacLeod*

SRINAGAR KASHMIR
*30th September 1897*

My Dear Miss MacLeod

Come soon if you intend to come really From November to the middle of February India is cool after that it is hot You will be able to see all you want within *that time but to see all takes years*

I am in a hurry therefore excuse this hasty card Kindly tender my love to Mrs Bull and my good wishes and earnest thoughts for Goodwin s speedy recovery My love to Mother to Alberta to the baby to Holister and last not the least to Franky

Yours in the Lord
Vivekananda

## CVII

*To Swami Brahmananda*

SRINAGAR KASHMIR
*30th September 1897*

Dear Rakhal

I received your affectionate letter and also the letter from the Math I am leaving for the Punjab in two or three days I have received the foreign mail The following are my answers to Miss Noble s questions in her letter

1 Nearly all the branches have been started but the movement is only just beginning

2 Most of the monks are educated Those that are not are also having secular education But above all to do good perfect unselfishness is absolutely necessary

To ensure that more attention is given to spiritual exercises than to anything else

3 Secular educators We get mostly those who have already educated themselves What is needed is training them into our method and building up of character The training is to make them obedient and fearless and the method is to help the poor physically first and then work up to higher regions of mentality

Arts and Industries This part of the programme alone cannot be begun for want of funds The simplest method to be worked upon at present is to induce Indians to use their own produce and get markets for Indian artware etc in other countries This should be done by persons who are not only not middlemen themselves but will devote the entire proceeds of this branch to the benefit of the workmen

4 Wandering from place to place will be necessary till people come to education The religious character of the wandering monks will carry with it a much greater weight than otherwise

5 All castes are open to our influence So long the highest only have been worked upon But since the work department is in full operation in different famine centres we are influencing the lower classes more and more

6 Nearly all the Hindus approve our work only they are not used to practical co operation in such works

7 Yes from the very start we are making no distinction in our charities or other good works between the different religions of India

Reply to Miss N according to these hints

See that there is no remissness whatever in the medical treatment of Yogen—if necessary spend money by drawing on the capital Did you go and meet Bhavanath s wife?

If Brahmachari Hariprasanna can come it will be very

helpful Mr Sevier has become very impatient about acquiring a house somewhere it will be good if some thing is done quickly about it! Hariprasanna is an engineer so he will be able to do something quickly about it Also he understands better about the suitability of places They (the Seviers) like to have a place somewhere near about Dehra Dun or Mussoorie that is to say the place must not be too cold and must be habitable throughout the year So send Hariprasanna at once straight to Sj Shyamapada Mukherjee Medical Hall Ambala Cantonment As soon as I go down to the Punjab I shall send Mr Sevier along with him I am returning (to the Math) in a trice after a tour of the Punjab Karachi and then via Rajputana not via Kathiawar and Gujarat—to Nepal Tulsi has gone to Madhya Bharat—is it for the famine relief work?

My blessings and love to all I have got the news that Kali has reached New York but he has not written any letter Sturdy writes that his work had increased so much that people were amazed—and a few persons have also written me praising him highly However there is not so much difficulty in America the work will go on somehow or other Send Shuddhananda and his brother along with Hariprasanna Of the party only Gupta and Achyut will accompany me

Yours affectionately
VIVEKANANDA

## CVIII*

*To Swami Ramakrishnananda*

SRINAGAR KASHMIR
*30th September 1897*

MY DEAR SHASHI

Now I am returning from a visit to places in Kashmir In a day or two I shall leave for the Punjab As my

health is now much better I have decided to tour again in the same way as before Not too much lecturing—one or two lectures perhaps in the Punjab otherwise none The people of our country have not yet offered me even as much as a pice for my travelling expenses—and to cap it all to take with you a whole party well you can easily understand how troublesome it all is It is also a matter of shame to have to draw upon only the English disciples So as before I start out with only a blanket In this place there is no need for any person like Goodwin as you can see

A monk from Ceylon P C Jinawar Vamar by name has written to me among other things that he wants to visit India Perhaps he is the same monk who comes of the Siamese royal family His address is Wellawatta Ceylon If convenient invite him to Madras He believes in the Vedanta It will not be so difficult to send him to other places from Madras It is also good to have such a person in the Order My love and blessings to you and all others

Yours affectionately
VIVEKANANDA

PS The Maharaja of Khetri is reaching Bombay on the 10th October Don t forget to present him an address of welcome V

## CIX*

*To Swami Brahmananda*

SRINAGAR KASHMIR
*30th September 1897*

MY DEAR RAKHAL

I understand from a letter of Gopal Dada that you have seen that piece of land at Konnagar It seems that

that site is rent free and measures 16 bighas (about 5 acres) and that the price is below eight or ten thousand rupees Do what you think best after considering the healthiness and other factors In a day or two I shall leave for the Punjab So don t write any more letters to me at this address I shall telegraph to you my next address Don t forget to send Hariprasanna Tell Gopal Dada thus Your health will soon be all right—winter is coming what fear? Eat well and be merry Write a letter to Mrs C Sevier at Spring Dale Murree as to Yogen s present state of health marking on the cover to await arrival Give my love and blessings to all

Yours affectionately
VIVEKANANDA

PS The Maharaja of Khetri reaches Bombay on the 10th October Don t forget to give him an address of welcome V

## CX

*To Sister Nivedita*

SRINAGAR KASHMIR
*1st October 1897*

DEAR MARGO

Some people do the best work when *led* Not every one is *born to lead* The best leader however is one who leads like the baby The baby though apparently depending on everyone is the king of the household At least to my thinking that is the secret Many feel but only a few can express It is the power of expressing one s love and appreciation and sympathy

for others that enables one person to succeed better in spreading the idea than others

I shall not try to describe Kashmir to you Suffice it to say I never felt sorry to leave any country except this Paradise on earth and I am trying my best if I can to influence the Raja in starting a centre So much to do here and the material so hopeful!

The great difficulty is this I see persons giving me almost the whole of their love But I must not give any one the whole of mine in return for that day the work would be ruined Yet there are some who will look for such a return not having the breadth of the impersonal view It is absolutely necessary to the work that I should have the enthusiastic love of as many as possible while I myself remain entirely impersonal Otherwise jealousy and quarrels would break up everything A leader must be impersonal I am sure you understand this I do not mean that one should be a brute making use of the devotion of others for his own ends and laughing in his sleeve meanwhile What I mean is what I am intensely personal in my love but having the power to pluck out my own heart with my own hand if it becomes necessary for the good of many for the welfare of many as Buddha said Madness of love and yet in it no bondage Matter changed into spirit by the force of love Nay that is the gist of our Vedanta There is but One seen by the ignorant as matter by the wise as God And the history of civilisation is the progressive reading of spirit into matter The ignorant see the person in the non person The sage sees the non person in the person Through pain and pleasure joy and sorrow this is the one lesson we are learning

Yours ever with love and truth

VIVEKANANDA

CXI*

*To Swami Brahmananda*

MURREE
*11th October 1897*

MY DEAR RAKHAL

I feel I have been working as if under an irresistible impulse for the last ten days beginning from Kashmir It may be either a physical or a mental disease Now I have come to the conclusion that I am unfit for further work I now understand that I have been very harsh to all of you But I knew however that you would bear with all my shortcomings in the Math there is no one else who will do so I have been increasingly harsh to you Whatever has happened is now past—it is all the result of past Karma What is the good of my repentance? I do not believe in it It is all Karma Whatever of Mother s work was to be accomplished through me *She made me do and has now flung me aside breaking* down my body and mind Her will be done!

Now I retire from all this work In a day or two I shall give up everything and wander out alone I shall spend the rest of my life quietly in some place or other Forgive me if you all will or do what you like Mrs Bull has given much of the money She has implicit confidence in Sharat Do the work of the Math with Sharat s advice or do as you will But I have all along been like a hero—I want my work to be quick like lightning and firm as adamant Similarly shall I die also Therefore kindly do my work for me—no question of success or defeat enters here at all I have never retreated in a fight—shall I now ? There is success and failure in every work But I am inclined to believe that one who is a coward will after death be born as an insect or a worm that there is no salvation for a coward

even after millions of years of penance Well shall I after all be born as a worm? In my eyes this world is mere play—and it will always remain as such Should one spend six long months brooding over the questions of honour and disgrace gain and loss pertaining to this? I am a man of action Simply advice upon advice is being given—this one says this that one says that again that man threatens and this one frightens! This life is not in my view such a sweet thing that I would long to live through so much care and caution and fear Money life friends and relatives and the love of men and myself—if one wants to enter into work fully assured beforehand of all these—if one has to be so much ridden with fear then one will get just what Gurudeva used to say The crow thinks itself very clever but [1]—well he will get that After all what is the purpose behind all these—money and wealth Maths and institutions preaching and lecturing? There is only one purpose in the whole of life—education Otherwise what is the use of men and women land and wealth?

So loss of money or loss of anything else—I cannot bother about and I will not When I fight I fight with girded loins—that much I fully understand and I also understand that man that hero that god who says Don t care be fearless O brave one here I am by your side! To such a man god I offer a million salutations Their presence purifies the world they are the saviours of the world And the others who always wail Oh don t go forward there is *this* danger there is *that* danger —those dyspeptics—they always tremble with fear But through the grace of the Divine Mother my mind is so strong that even the most terrible dyspesia shall not make me a coward To cowards

[1] The crow thinks itself v ry cleve but it cannot help eating filth

what advice shall I offer?—nothing whatsoever have I to say But this I desire that I should find shelter at the feet of those brave souls who dared to do great deeds even though they failed to succeed of those heroes who never quailed nor shirked of those fighters who never disobeyed orders through fear or pride I am the child of the Divine Mother the source of all power and strength To me cringing fawning whining degrading inertia and hell are one and the same thing O Mother of the Universe O my Gurudeva who would constantly say This is a hero! —I pray that I may not have to die a coward This is my prayer O brother उत्पत्स्यतेऽस्ति मम कोऽपि समानधर्मा" — certainly there is or there will be born one equal to me some one or other will certainly arise from these thousands of devotees of Shri Ramakrishna who will be like me and who will be able to understand me

O hero awake and dream no more Death has caught you by the forelock still fear not What I have never done—fleeing from the battle—well will that happen today? For fear of defeat shall I retreat from the fight? Defeat is the ornament the hero adorns himself with What to acknowledge defeat without fighting! O Mother Mother! Not one capable of even playing second fiddle and yet the mind filled with petty self importance We understand everything
Now I retire everything I leave in your control If Mother sends me men again in whose heart there is courage in whose hands strength in whose eyes there is fire real children of the Mother—if She gives me even one such then I shall work again then I shall return Otherwise I shall take it that by Mother s will this is the end I am in a tremendous hurry I want to work at hurricane speed and I want fearless hearts

I have rebuked poor Sarada severely What to

do? I do scold but I also have much to complain Almost suffocated by short breathing standing and standing I have written an article for him It is all good otherwise how will renunciation come? Will Mother in the end kill me with attachment? I have offended all of you—do what you want

I bless you all with a full heart May Mother enshrine Herself in your hearts as strength अभय प्रतिष्ठा—the support that is fearlessness—may She make you all fearless This I have seen in life—he who is over cautious about himself falls into dangers at every step he who is afraid of losing honour and respect gets only disgrace he who is always afraid of loss always loses

May all good attend you all

Yours affectionately
VIVEKANANDA

## CXII*

*To Swami Brahmananda*

MURREE
*12th October 1897*

MY DEAR RAKHAL

I wrote at length in yesterday s letter I think it desirable to give you special directions about certain matters (1) To all those who collect money and send it to the Math the acknowledgment of the amounts will be issued from the Math (2) The acknowledgment must be in duplicate one for the sender and one for filing in the Math (3) There must be a big register in which all the names and addresses of the donors will be entered (4) Accounts accurate to the last pie must be kept of the amounts that are donated to the Math Fund and fully accurate accounts should be obtained from Sarada and others to whom money is

given For lack of accurate account keeping see that I am not accused as a cheat These accounts should afterwards be published (5) Immediately go and register a will under lawyer's advice to the effect that in case you and I die then Hari and Sharat will succeed to all that there is in our Math

I have not yet got any news from Ambala whether Hariprasanna and others have reached there or not Give the other half sheet of this letter to Master Mahashay

Yours affectionately
VIVEKANANDA

## CXIII

*To Sister Nivedita*

JAMMU
*3rd November 1897*

MY DEAR MISS NOBLE

Too much sentiment hurts work Hard as steel and soft as a flower is the motto

I shall soon write to Sturdy He is right to tell you that in case of trouble I will stand by you You will have the whole of it if I find a piece of bread in India—you may rest assured of that I am going to write to Sturdy from Lahore for which I start tomorrow I have been here for 15 days to get some land in Kashmir from the Maharaja I intend to go to Kashmir again next summer if I am here and start some work there

With everlasting love

Yours
VIVEKANANDA[1]

[1] This was the last letter received in England by Sister Nivedita.

## CXIV*

*To Swami Brahmananda*

LAHORE
*11th November 1897*

MY DEAR RAKHAL

The lecture at Lahore is over somehow I shall start for Dehra Dun in a day or two I have now postponed my tour to Sind as none of you are agreeable to it and also because of various other obstacles Somebody has opened my two letters from England on the way So don t send me letters any further for the present Send them after I have written for them from Khetri If you go to Orissa then make arrangements that some one will do all the work as your representative—say Hari especially now when I am daily expecting letters from America

Perhaps the will that I asked you to make in favour of Hari and Sharat has now been made

Probably I shall leave Sadananda and Sudhir here after establishing a Society Now no more lecturing—I go in a hurry straight to Rajputana The establishment of the Math must have precedence over everything Without regular exercise the body does not keep fit talking talking all the time brings illness—know this for certain My love to all

Yours affectionately
VIVEKANANDA

## CXV*

*To Swami Brahmananda*

LAHORE
*15th November 1897*

MY DEAR RAKHAL

I hope you and Hari are now in good health The work in Lahore went off with great eclat Now I go to Dehra Dun The Sind tour is postponed I have yet no news whether Dinu Latu and Krishnalal have reached Jaipur Babu Nagendranath Gupta will collect subscriptions and donations from here and send them to the Math to meet expenses Send him regular receipts Let me know if you have received anything from Murree Rawalpindi and Sialkot

Reply to me C/o Post Master Dehra Dun Other letters you may send me after hearing from me from Dehra Dun My health is good only I have to get up at night once or twice I am having sound sleep sleep is not spoiled even after exhausting lectures and I am doing exercise every day there is no trouble at all Now come on work with redoubled energy Keep an eye on that big piece of land—in all secrecy We are making regular efforts so that the big Utsava[1] can be held there My love to all

Yours affectionately
VIVEKANANDA

PS It will be a very good thing if Master Mahashay will write now and then about us in *The Tribune* so that Lahore will not become cold again—now it is quite warmed up *Spend money a little economically* pilgrimage expenses should be borne by you personally preaching and propaganda expenses should be charged to the Math
V

[1] Celebration—of Shri Ramakrishna s birthday

## CXVI*

*To Swami Premananda*

DEHRA DUN
*24th November 1897*

MY DEAR BABURAM

I got all news about you from Hariprasanna I am especially pleased to hear that Rakhal and Hari are now quite well

Now Babu Raghunath Bhattacharya of Tehri is suffering very much from some pain in the neck I also have been suffering for a long time from some pain at the back of my neck If you can get hold of some very old ghee then send some of it to him at Dehra Dun and some of it to me also at my Khetri address You are sure to get it from Habu or Sharat (lawyer) Address it to Babu Raghunath Bhattacharya Dehra Dun N W P and it will reach him

The day after tomorrow I am leaving for Saharanpur from there to Rajputana

Yours affectionately
VIVEKANANDA

PS My love to all
V

## CXVII*

*To Swami Brahmananda*

DELHI
*30th November 1897*

MY DEAR RAKHAL

Part of the money that Miss Muller promised has reached Calcutta The balance will come afterwards in a short while We have also some amount Miss

Muller will deposit the money in your name as well as mine with Messrs Grindlay & Co As you have got the power of attorney you alone can draw all the money As soon as the money is deposited you yourself with Hari go to Patna and meet that gentleman and by some means or other influence him and if the price of the land is reasonable buy it If it cannot be had try for some other plot of ground I am trying to get some money in these parts too *We must hold the big festival* on our own plot of ground—remember this must be your first and foremost work come what may

You have shown great pluck the work you have done these last eight or nine months does you great credit Now you must see to it that a Math and a centre in Calcutta are steadily established before everything else Work hard to this end but quietly and in secret Get information about the Cossipore house also To morrow I am going to Khetri via Alwar My health is good *even* though I have caught a cold Send all letters to Khetri My love to all

Yours affectionately
VIVEKANANDA

PS What about the will I asked you to make in favour of Sharat and Hari? Or will you buy the land and other things in my name and I shall make a will ?

V

## CXVIII*

*To Swami Brahmananda*

DELHI
*8th December 1897*

MY DEAR RAKHAL,

We shall start for Khetri tomorrow Gradually the luggage has greatly increased After Khetri I intend to

send everybody to the Math I could get done through them none of the work which I had hoped That is to say it is quite certain that none of them can do any thing if he always remains with me Unless each goes about independently he will not be able to do anything The fact is who will care for them if they are in my company ? Only waste of time So I am sending them to the Math

Keep as a fund for some permanent work the balance of the money left after the famine relief Do not spend that money for any other purpose and after giving the full accounts of the famine work note down thus So much balance is left for some other good work

Work I want—I don t want any humbug To those who have no desire to work I say My dear fellow now go and follow your own way As soon as I reach Khetri I will send you the power of attorney with my signature if the document has reached there mean while Open only those letters from America which bear the Boston postmark not the others Send all my letters to Khetri I shall get money in Rajputana itself no cause for anxiety on that score Try energetically *for the piece of land we must have the celebration on* our own ground this time

Is the money in the Bengal Bank or have you kept it elsewhere ? Be very careful about money matters keep detailed accounts and regarding money know for certain that one cannot rely even on one s own father

Give my love to all Write to me how Hari is doing Recently I met at Dehra Dun the Udasi Sâdhu Kalyân Dev and a few others I hear the people at Hrishikesh are very eager to see me and are asking again and again about me

Yours affectionately

VIVEKANANDA

## CXIX*

*To Swami Brahmananda*

KHETRI
*14th December, 1897*

MY DEAR RAKHAL

I have today sent your power of attorney with my signature Draw the money as early as you can and wire to me as soon as you have done so A Raja of a place in Bundelkhand named Chatrapur has invited me I shall visit the place on my way to the Math The Raja of Limbdi too is writing earnestly I cannot avoid going there also I shall make a lightning tour of Kathiawar—that is what it will come to I shall feel great relief as soon as I reach Calcutta There is no news from Boston as yet perhaps Sharat is coming anyway whenever any news comes from anywhere write to me immediately

Yours affectionately
VIVEKANANDA

PS How is Kanai ? I hear that his health is not good Pay special attention to him and see that nobody is unduly bossed over Write to me about your health as well as Hari s V

## CXX*

*To Swami Shivananda*

JAIPUR
*27th December 1897*

MY DEAR SHIVANANDA

Mr Setlur of Girgaon Bombay whom you know very well from Madras writes to me to send somebody

to Africa to look after the religious needs of the Indian emigrants in Africa He will of course send the man and bear all expenses

The work will not be very congenial at present I am afraid but it is really the work for a perfect man You know *the emigrants are not liked at all by the white* people there To look after the Indians and at the same time maintain cool headedness so as not to create more strife—is the work there No immediate result can be expected but in the long run it will prove a more bene ficial work for India than any yet attempted I wish you to try your luck in this If you agree please write to Setlur about your willingness and ask for more information mentioning this letter And godspeed to you! I am not very well but am going to Calcutta in a few days and will be all right

Yours in the Lord
VIVEKANANDA

## CXXI

*To Raja Pyari Mohan Mukherjee*

THE MATH BELUR
*25th February 1898*

MY DEAR RAJAJI

My gratitude for your very kind invitation to speak I had a talk with Mr Bhattacharya on the subject a few days back and I am trying my best as a result to find time for your Society I also promised to let them know the result on Sunday

A friend to whom I owe much is here presumably to take me to his place in Darjeeling

There are some American friends come and every spare moment is occupied in working for the new Math and several organisations therein and I expect to leave India next month for America

Believe me I am trying my best to be able to take advantage of this invitation of yours and shall communicate the result to you on Sunday through Mr Bhattacharya

Yours with love and blessings
VIVEKANANDA

## CXXII

*To Swami Ramakrishnananda*

MATH BELUR
HOWRAH P O,
*25th February 1898*

MY DEAR SHASHI

Our congratulations for the successful carrying out of the Mahotsava[1] in Madras Hope you had a good gathering and plenty of spiritual food We are all so glad that you have girded yourself to teach more of spirituality to the Madras people than those finger twistings and *kling phat*[2] you are so fond of Really your lecture on *Shriji*[3] was splendid I could only catch a report in the *Madras Mail* in Khandwa and the Math people have not had any Why don't you send us over a copy ?

I learn that you complain about my silence is it ? I have written you more letters however than you ever

[1] Big celebration—of Shri Ramakrishna's birthday
[2] Cryptic Mantras or sound formulae
[3] Shri Ramakrishna

wrote me from Europe and Amenca even You ought to give me all the news you can from Madras every week Simplest way is to put down a few lines and a few items of news every day on a sheet

My health has not been all nght of late at present it is much better Calcutta is unusually cool just now and the Amencan fnends who are here are enjoying it ever so much Today we take possession of the land we have bought and though it is not practicable to have the Mahotsava on it just now I must have something on it on Sunday Anyhow *Shnji s* relics must be taken to our place for the day and worshipped Gangadhar is here and asks me to wnte to you that though he has succeeded in getting some subscnptions for the *Brahmavadin* the delivery being very irregular he is afraid of losing them also soon I received your letter of recommendation for the young man with the old story of having nothing to eat Your Honour only added in the Madras edition got a number of children too for generating whom no recommendation was needed! I would be very glad to help him but the fact is I have no money every cent I had I have made over to Raja [1] as they all say I am a spendthnft and are afraid of keeping money with me I have however sent the letter to Rakhal if he can find the way to help your fnend the young man in having some more children He wntes that the Chnstians will help him out if he becomes a convert but he won t Perhaps he is afraid that his conversion will make Hindu India lose one of her bnghtest jewels and Hindu society the benefit of his propagating power to eternal misery!

The boys here are rather seedy owing to the unusual amount of pure and cool air they are made to breathe in and live on the bank of the Ganges in the new Math Sarada has his malana brought over from Dinajpur I

[1] Rakhal or Sw mi Brahm nanda

made him eat a dose of opium the other day without much benefit to him except his brain which progressed for some hours towards its natural direction namely idiocy Hari also has a touch I hope it will take off a good bit of their avoirdupois By the by we have once more started the dancing business here and it would make your heart glad to see Hari and Sarada and my own good self in a waltz How we keep balance at all is a wonder to me

Sharat has come and is hard at work as usual We have got some good furniture now and a big jump from the old Châtâi (mat) in the old Math to nice tables and chairs and three Khâts (cots) mind you We have curtailed the Pujâ (worship) work a good deal and the amount of pruning your *klings* and *phats* and *swahâs* have undergone would make you faint The puja occupied only the *day* and they slept soundly all night How are Tulsi and Khoka? Are they more tractable with you than under Rakhal? You may run in to Calcutta for a few days giving charge to Tulsi but it is so expensive and then you must go back as Madras has to be *thoroughly worked up* I am going to America again with Mrs Bull in a few months

Give my love to Goodwin and tell him that we are going to see him at any rate on our way to Japan Shivananda is here and I have toned down a bit his *great desire* to go to the Himalayas *for good*! Is Tulsi con templating the same? The *bandicoot hole* will be a sufficient cave for him I suppose

So the Math here is a *fait accompli* and I am going over to get more help Work on with energy India is a rotten corpse inside and outside We shall revive it by the blessings of Shri Maharaj With all love

Ever yours in the Lord
VIVEKANANDA

## CXXIII

### *To Miss Mary Hale*

MATH BELUR
HOWRAH DISTRICT
BENGAL INDIA
*2nd March 1898*

MY DEAR MARY

You have news of me already I hope through the letter I wrote to Mother Church You are all so kind the whole family to me I must have belonged to you in the past as we Hindus say *My only regret is that the* millionaires do not materialise and I want them so badly just now that I am growing decrepit and old and hot in the midst of building and organising Though Harriet has got one of a million virtues a few millions of cash virtue would have made it more shining I am sure so you do not commit the same mistake A certain young couple had everything favourable to make them man and wife except that the bride s father was deter mined not to give his daughter to anyone who had not a million The young people were in despair when a clever matchmaker came to the rescue He asked the bride groom whether he was willing to part with his nose on payment of a million—which he refused The match maker then swore before the bride s father that the bride groom had in store goods worth several millions and the match was completed Don t you take like millions Well well you could not get the millionaire so I could not get the money so I had to worry a good deal and work hard to no purpose so I got the disease It requires brains like mine to *find out the true cause—I am charmed* with myself!

Well it was in Southern India when I came from London and when the people were feting and feasting

and pumping all the work out of me that an old hereditary disease made its appearance The tendency was always there and excess of mental work made it express itself Total collapse and extreme prostration followed and I had to leave Madras immediately for the cooler North a day s delay meant waiting for a week in that awful heat for another steamer By the by I learned afterwards that Mr Barrows arrived in Madras next day and was very much chagrined at not finding me as he expected though I helped getting up an address for him and arranged for his reception Poor man he little knew I was at death s door then

I have been travelling in the Himalayas all through last summer and a cold climate I found immediately brought me round but as soon as I come into the heat of the plains I am down again From today the heat in Calcutta is becoming intense and I will soon have to fly This time to cool America as Mrs Bull and Miss MacLeod are here I have bought a piece of land for the institution on the river Ganges near Calcutta on which is a little house where they are living now within a stone s throw is the house where the Math is situated at present in which we live

So I see them every day and they are enjoying it immensely *a l Inde* They intend making a trip to Kashmir in a month and I am going with them as a guide and friend and philosopher perhaps if they are willing After that we all sail for the land of freedom and scandal

You need not be alarmed with me as the disease will *take two or three years at worst to carry me off* At best it may remain a harmless companion I am content Only I am working hard to set things all right and always so that the machine moves forward when I am off the stage Death I have conquered long ago when I gave

up life My only anxiety is the *work* and even that to the Lord I dedicate and He knows best

Ever yours in the Lord
VIVEKANANDA

## CXXIV

*To Swami Ramakrishnananda*

MATH BELUR
(HOWRAH)
*March 1898*

MY DEAR SHASHI

I forgot to write you about two things 1 That Tulsi ought to learn shorthand from Goodwin at least the beginning 2 I had to write a letter almost every mail to Madras while I was out of India I have in vain written for a copy of those letters Send me all those letters I want to write out my travels Do not fail and I shall send them back as soon as they have been used up The *Dawn* can manage with 200 subscribers to come out regularly on Rs 40/ an issue expenditure This is a great fact to know The P B (*Prabuddha Bharata*) seems to be very disorganised try best to organise it Poor Alasinga I am sorry for him Only thing I can do is to make him entirely free for a year so that he may devote all his energy to the *Brahmavadin* work Tell him not to worry I have him always in mind poor child his devotion I can never repay

I am thinking of going to Kashmir again with Mrs Bull and Miss MacLeod Return to Calcutta and start for America from here

Miss Noble is really an acquisition She will soon surpass Mrs Besant as a speaker I am sure

Do look after Alasinga I have an idea that he is

breaking himself with work Tell him the best work is only done by alternate repose and work Give him all my love We had two public lectures in Calcutta one from Miss Noble and the other from our Sharat Both of *them did very well indeed* there was great *enthusiasm* which shows that the Calcutta public has not forgotten us Some of the members of the Math had a touch of influenza They are all right now The thing is working nicely Shri (Holy) Mother is here and the European and American ladies went the other day to see her and what do you think *Mother ate with them even there*! Is not that grand? The Lord is watching over us there is no fear do not lose your nerves keep your health and take things easy It is always good to give a few strong strokes and rest on your oars Rakhal is living with the new land and buildings I was not satisfied with the Mahotsava this year What it should be is a grand mixture of all the different phases here We shall try it next year—I shall send instructions With love to all of you there and blessings

VIVEKANANDA

## CXXV

### *To Miss Josephine MacLeod*

DARJEELING
*18th April 1898*

MY DEAR JOE JOE

I was down with fever brought upon perhaps by excessive mountain climbing and the bad health in the station

I am be ter today and intend leaving this in a day or two In spite of the great heat there I used to sleep well

ın Calcutta and had some appetite Here both have vanished—this is all the gain

I could not see Miss Muller yet on the subject of Marguerite but I intend to write her today She is making all arrangement to receive her here Mr Gupta is also invited to teach them Bengali She may now do some thing about her I shall however write

It will be easy for Marguerite to see Kashmir any time during her stay but if Miss M is not willing there will be a big row again to injure both her and Marguerite

I am not sure whether I go to Almora again Much riding it seems is sure to bring on a relapse I will wait for you at Simla—whilst you pay your visit to the Seviers We will think on it when I am in I am so glad to learn that Miss Noble delivered an address at the R K Mission With all love to the Trinity

Ever yours in the Lord
VIVEKANANDA

## CXXVI*

*To Swami Brahmananda*

DARJEELING
*23rd April 1898*

MY DEAR RAKHAL

My health was excellent on my return from Sanduk phu (11 924 ft) and other places but after returning to Darjeeling I had first an attack of fever and after recovering from that I am now suffering from cough and cold I try to escape from this place every day but they have been constantly putting it off for a long time However tomorrow Sunday I am leaving after halt ing at Kharsana for a day I start again for Calcutta on Monday I shall send you a wire after starting W

should hold an annual meeting of the Ramakrishna Mission and also one for the Math In both the meetings the accounts of famine relief must be submitted and the report of the famine relief must be published Keep all this ready

Nityagopal says managing an English magazine will not cost much So let us first get this one out and we shall see to the Bengali magazine afterwards All these points will have to be discussed Is Yogen willing to shoulder the responsibility of running the paper? Shashi writes that if Sharat goes some time to Madras they may make a lecture tour jointly Oh how hot it is now! Ask Sharat if G C Sarada Shashi Babu and others have got their articles ready Give my love and blessing to Mrs Bull Miss MacLeod and Nivedita

Yours affectionately
VIVEKANANDA

## CXXVII

*To Miss Josephine MacLeod*

DARJEELING
*29th April 1898*

MY DEAR JOE JOE

I have had several attacks of fever the last being influenza

It has left me now only I am very weak yet As soon as I gather strength enough to undertake the journey I come down to Calcutta

On Sunday I leave Darjeeling probably stopping for a day or two at Kurseong then direct to Calcutta Calcutta must be very hot just now Never mind it is all the better for influenza In case the plague breaks out in Calcutta I must not go anywhere and you start for Kashmir with Sadananda How did you like the old

gentleman Devendra Nath Tagore ? Not as stylish as Hans Baba with Moon God and Sun God of course What enlightens your insides on a dark night when the Fire God Sun God Moon God and Star Goddesses have gone to sleep ? It is hunger that keeps my consciousness up I have discovered Oh the great doctrine of correspondence of light! Think how dark the world has been all these ages without it! And all this knowledge and love and work and all the Buddhas and Krishnas and Christs—vain vain have been their lives and work for they did not discover *that* which keeps the inner light when the Sun and Moon were gone to the limbo for the night! Delicious isn t it?

If the plague comes to my native city I am determined to make myself a sacrifice and that I am sure is a Darn sight better way to Nirvâna than pouring oblations to all that ever twinkled

I have had a good deal of correspondence with Madras with the result that I need not send them any help just now On the other hand I am going to start a paper in Calcutta I will be ever so much obliged if you help me starting that As always with undying love

Ever yours in the Lord
VIVEKANANDA

## CXXVIII*

*To Swami Brahmananda*

ALMORA
*20th May 1898*

MY DEAR RAKHAL

I have got all the news from your letter and have replied to your wire already Niranjan and Govindalal Shah will wait at Kathgodam for Yogen Ma After I reached Naini Tal Baburam went from here to Naini T l

on horseback against everybody's advice and while returning he also accompanied us on horseback I was far behind as I was in a Dandi When I reached the dak bungalow at night I heard that Baburam had again fallen from the horse and had hurt one of his arms—though he had no fractures Lest I should rebuke him he stayed in a private lodging house Because of his fall Miss MacLeod gave him her Dandi and herself came on the horse He did not meet me that night Next day I was making arrangements for a Dandi for him when I heard that he had already left on foot Since then I have not heard of him I have wired to one or two places but no news Perhaps he is putting up at some village Very well! They are experts in increasing one's worries

There will be a Dandi for Yogen Ma but all the rest will have to go on foot

My health is much better but the dyspepsia has not gone and again insomnia has set in It will be very helpful if you can soon send some good Ayurvedic medicine for dyspepsia

Since only one or two sporadic cases of plague have occurred there there is plenty of accommodation in the Government plague hospital and there is a talk of having hospitals in every Ward Taking all this into consideration do what the situation demands But remember that something said by somebody in Baghbazar does not constitute public opinion Take care that funds do not run short in times of need and that there is no waste of money For the present buy a plot of ground for Ramlal in the name of Raghuvir[1] after careful consideration The Holy Mother will be the Sebait after her will come Ramlal and Shibu will succeed them as Sebait or make any other arrangement that

[1] The family deity at Shri Ramakrishna's birthplace Kamarpukur Ramlal being his nephew

seems best You can if you think it right begin the construction of the building even now For it is not good to live in a new house for the first one or two months as it will be damp the anti erosion wall can be completed afterwards I am trying to raise money for the magazine See that the sum of Rs 1 200 which I gave for the magazine is kept only for that account

All the others are well here Sadananda sprained his foot yesterday He says he will be all right by the evening The climate at Almora is excellent at this time Moreover the bungalow rented by Sevier is the best in Almora On the opposite side Annie Besant is staying in a small bungalow with Chakravarty Chakravarty is now the son in law of Gagan (of Ghazipur) One day I went to see him Annie Besant told me entreatingly that there should be friendship between her organisation and mine all over the world etc etc Today Besant will come here for tea Our ladies are in a small bungalow near by and are quite happy Only Miss MacLeod is a little unwell today Harry Sevier is becoming more and more a Sadhu as the days pass by

Brother Hari sends you his greetings and Sadananda Ajoy and Suren send you their respectful salutations My love to you and all the others

Yours affectionately
VIVEKANANDA

PS Give my love to Sushil and Kanai and all the others V

## CXXIX

*To Mr E T Sturdy*

KASHMIR
*3rd July 1898*

DEAR STURDY

Both the editions had my assent as it was

between us that we would not object to anybody s publishing my books Mrs Bull knows about it all and is writing to you

I had a beautiful letter from Miss Souter the other day She is as friendly as ever

With love to the children Mrs Sturdy and yourself

Ever yours in the Lord
VIVEKANANDA

## CXXX*

*To Swami Brahmananda*

SRINAGAR
*17th July 1898*

MY DEAR RAKHAL

I got all the news from your letter My opinion regarding what you have written about Sarada is only that it is difficult to make a magazine in Bengali paying but if all of you together canvass subscribers from door to door it may be possible In this matter do as you all decide Poor Sarada has already been disappointed once What harm is there if we lose a thousand rupees by supporting such an unselfish and very hardworking person? What about the printing of *Raja Yoga?* As a last resort you may give it to Upen on certain terms of *sharing the profit in the sales* About money matters the advice given previously is final Henceforward do what you consider best regarding expenditure and other things I see very well that my policy is wrong and yours is correct regarding helping others that is to say if you help with money too much at a time people instead of feeling grateful remark on the contrary that they have got a *simpleton* to bank upon I always lost sight of the demoralising influence of charity on the

receiver Secondly we have no right to deviate even slightly from the purposes for which we collect the dona tions Mrs Bull will get her rosary all right if you send it care of Chief Justice Rishibar Mukhopadhyaya Kashmir Mr Mitra and the Chief Justice are taking every care of them We could not get a plot of ground in Kashmir yet but there is a chance that we shall do so soon If you can spend a winter here you are sure to recoup your health If the house is a good one and if you have enough fuel and warm clothing then life in a land of snow is nothing but enjoyable Also for stomach troubles a cold climate is an unfailing remedy Bring Yogen with you for the earth here is not stony it is clay like that of Bengal

If the paper is brought out in Almora the work will progress much for poor Sevier will have something to do and the local people also will get some work Skil ful management lies in giving every man work after his own heart By all the means in our power the Nivedita Girls School in Calcutta should be put on a firm footing To bring Master Mahashay to Kashmir is still a far cry for it will be long before a college is established here But he has written that it is possible to start a college in Calcutta with him as the principal at an initial expense of a thousand rupees I hear that you all also favour this proposal In this matter do what you all consider best My health is all right I have to get up seldom at *night even though I take twice a day rice* and potatoes sugar or whatever I get Medicine is useless— it has no action on the system of a Knower of Brahman! Everything will be digested—don t be afraid

The ladies are doing well and they send you their greetings Two letters from Shivananda have come I have also received a letter from his Australian disciple I

hear that the outbreak of plague in Calcutta has completely subsided

Yours affectionately
VIVEKANANDA

## CXXXI*

*To Swami Brahmananda*

SRINAGAR
*1st August 1898*

MY DEAR RAKHAL

You are always under a delusion and it does not leave you because of the strong influence good or bad of other brains It is this whenever I write to you about accounts you feel that I have no confidence in you My great anxiety is this the work has somehow been started but it should go on and progress even when we are not here such thoughts worry me day and night Any amount of theoretical knowledge one may have but unless one does the thing actually nothing is learnt I refer repeatedly to election accounts and discussion so that everybody may be prepared to shoulder the work If one man dies another—why another only ten if necessary—should be ready to take it up Secondly if a man s interest in a thing is not roused he will not work whole heartedly all should be made to understand that everyone has a share in the work and property and a voice in the management This should be done while there is yet time Give a responsible position to everyone alternately but keep a watchful eye so that you can control when necessary thus only can men be trained for the work Set up such a machine as will go on automatically no matter who dies or lives We Indians suffer from a great defect viz we cannot make a permanent organisation—and the reason is that we

never like to share power with others and never think of what will come after we are gone

I have already written everything regarding the plague Mrs Bull and Miss Muller and others are of opinion that it is not desirable to spend money uselessly when hospitals have been started in every Ward We lend our services as nurses and the like Those that pay the piper must command the tune

The Maharaja of Kashmir has agreed to give us a plot of land I have also visited the site Now the matter will be finalised in a few days if the Lord wills Right now before leaving I hope to build a small house here I shall leave it in the charge of Justice Mukherjee when departing Why not come here with somebody else and spend the winter? Your health will improve and a need too will be fulfilled The money I have set apart for the press will be sufficient for the purpose but all will be as you decide This time I shall surely get some money from N W P Rajputana and other places Well give as directed money to a few persons I am borrowing this amount from the Math and will pay it back to you with interest

My health is all right in a way It is good news that the building work has begun My love to all

Yours affectionately
VIVEKANANDA

## CXXXII

*To Miss Mary Hale*

SRINAGAR KASHMIR
*28th August 1898*

MY DEAR MARY

I could not make an earlier opportunity of writing

you and knowing that you were in no hurry for a letter I will not make apologies You are learning all about Kashmir and ourselves from Miss MacLeod s letter to Mrs Leggett I hear—therefore needless going into long rigmaroles about it

The search for Heinsholdt s Mahatmas in Kashmir will be entirely fruitless and as the whole thing has first to be established as coming from a creditable source the attempt will also be a little too early How are Mother Church and Father Pope and where? How are you ladies young and old? Going on with the old game with more zest now that one has fallen off the ranks? How is the lady that looks like a certain statue in Florence? (I have forgotten the name) I always bless her arms when I think of the comparison

I have been away a few days Now I am going to join the ladies The party then goes to a nice quiet spot behind a hill in a forest through which a murmuring stream flows to have meditation deep and long under the deodars (trees of God) cross legged *a la Buddha*

This will be for a month or so when by that time our good work will have spent its powers and we shall fall from this Paradise to earth again then work out our Karma a few months and then will have to go to hell for bad Karma in China and our evil deeds will make us sink in bad odours with the world in Canton and other cities Thence Purgatory in Japan? And regain Paradise once more in the U S of America This is what Pumpkin Swami brother of the Coomra Swami foretells (in Bengali Coomra means squash) He is very clever with his hands In fact his cleverness with his hands has several times brought him into great dangers

I wished to send you so many nice things but alas! the thought of the tariff makes my desires vanish like youth in women and beggars dreams

By the by I am glad now that I am growing grey

every day My head will be a full blown white lotus by the time you see me next

Ah I Mary if you could see Kashmir—only Kashmir the marvellous lakes full of lotuses and swans (there are no swans but geese—poetic licence) and the big black bee trying to settle on the wind shaken lotus (I mean the lotus nods him off refusing a kiss—poetry) then you could have a good conscience on your death bed As this is earthly paradise and as logic says one bird in the hand is equal to two in the bush a glimpse of this is wiser but economically the other better no trouble no labour no expense a little namby pamby dolly life and later that is all

My letter is becoming a bore so I stop (It is sheer idleness ) Good night

Ever yours in the Lord
VIVEKANANDA

My address always is
Math Belur
Howrah Dist Bengal India

## CXXXIII*

*To Shri Haripada Mitra*

SRINAGAR KASHMIR
*17th September 1898*

DEAR HARIPADA

I got all news from your letter and wire That you may easily pass your examination in Sindhi is my prayer to the Lord

Recently my health was very bad and so I have been delayed otherwise I had intended to leave for the Punjab this week The doctor had advised me not to go to

the plains at the present time as it is very hot there Perhaps I may reach Karachi by about the last week of October Now I am doing somewhat well There is nobody else with me now excepting two American friends—ladies Probably I shall part from them at Lahore They will wait for me in Calcutta or in Rajputana I shall probably visit Cutch Bhuj Junagad Bhavnagar Limbdi and Baroda and then proceed to Calcutta My present plan is to go to America via China and Japan in November or December but it is all in the hands of the Lord The above mentioned American friends bear all my expenses and I shall take from them all my expenses including railway fare up to Karachi But if it is convenient to you send me Rs 50/ by wire C/o Rishibar Mukhopadhyaya Chief Justice Kashmir State Srinagar It will be a great help to me for I have incurred much extra expense of late owing to illness and I feel a little ashamed to have to depend always on my foreign devotees With best wishes

Yours affectionately
VIVEKANANDA

## CXXXIV*

*To Shri Haripada Mitra*

LAHORE
*16th October 1898*

MY DEAR HARIPADA

In Kashmir my health has completely broken down and I have not witnessed the Durgâ Puja for the last nine years so I am starting for Calcutta I have for the present given up the plan of going to America I think I shall have plenty of time to go to Karachi during the winter

My brother disciple Saradananda will send Rs 50/ from Lahore to Karachi Don t yield to sorrow—every thing is in God s hands Certainly I won t go anywhere this year without meeting all of you My blessings to all

Yours affectionately
VIVEKANANDA

CXXXV

*To Miss Josephine MacLeod*

57 RAM KANTA BOSE STREET
CALCUTTA
*12th November 1898*

MY DEAR JOE

I have invited a few friends to dinner tomorrow Sunday

We expect you at tea Everything will be ready then

Shri Mother is going this morning to see the new Math I am also going there Today at 6 p m Nivedita is going to preside If you feel like it and Mrs Bull strong do come

Ever yours in the Lord
VIVEKANANDA

CXXXVI

*To Miss Mary Hale*

MATH BELUR
HOWRAH DISTRICT
*16th March 1899*

MY DEAR MARY

Thanks to Mrs Adams she roused you naughty girls to a letter at last Out of sight out of mind —as

true in India as in America And the other young lady who just left her love as she flitted by deserves a duck ing I suppose

Well I have been in a sort of merry go round with my body which has been trying to convince me for months that it too much exists

However no fear with four mental healing sisters as I have no sinking just now Give me a strong pull and a long pull will you all together and then I am up!

Why do you talk so much about me in your one letter a year and so little about the four witches mumbling Mantras over the boiling pot in a corner of Chicago?

Did you come across Max Muller s new book *Ramakrishna His Life and Sayings*?

If you have not do and let Mother see it How is Mother? Growing grey? And Father Pope? Who have been our last visitors from America do you suppose? Brother love is a drawing card and Misses Meel they have been doing splendid in Australia and else where the same old fellies little changed if any I wish you could come to visit India—that will be some day in the future By the by Mary I heard a few months ago when I was rather worrying over your long silence that you were just hooking a Willy and so busy with your dancers and parties that explained of course your inability to write But Willy or no Willy I must have my money don t forget Harriet is discreetly silent since she got her boy but where is my money please? Remind her and her husband of it If she is Woolley I am greasy Bengali as the English call us here—Lord where is my money?

I have got a monastery on the Ganges now after all thanks to American and English friends Tell Mother to look sharp I am going to deluge your Yankee land with idolatrous missionaries

Tell Mr Woolley he got the sister but has not paid the brother yet Moreover it was the fat black queerly dressed apparition smoking in the parlour that frightened many a temptation away and that was one of the causes which secured Harriet to Mr Woolley therefore I want to be paid for my great share in the work etc etc Plead strong will you?

I do so wish I could come over to America with Joe for this summer but man proposes and who disposes? Not God surely always Well let things slide as they will Here is Abhayananda Marie Louise you know and she has been very well received in Bombay and Madras She will be in Calcutta tomorrow and we are going to give her a good reception too

My love to Miss Howe Mrs Adams to Mother Church and Father Pope and all the rest of my friends across the seven oceans We believe in seven oceans—one of milk one of honey one of curd one wine one sugar cane juice one salt one I forget what To you four sisters I waft my love across the ocean of honey

Ever sincerely your brother
VIVEKANANDA

PS Write when you find time between dances
V

## CXXXVII

### *To Mr E T Sturdy*

PORT SAID
*14th July 1899*

MY DEAR STURDY

I got your letter all right just now I have one from

M Nobel of Paris too Miss Noble has several from America

M Nobel writes to me to defer my visit to him at Paris to some other date from London as he will have to be away for a long time As you know sure I shall not have many friends staying now in London and Miss MacLeod is so desirous I should come A stay in England under these circumstances is not advisable Moreover I do not have much life left At least I must go on with that supposition I mean if anything has to be done in America it is high time we bring our scattered influence in America to a head—if not organise regularly Then I shall be free to return to England in a few months and work with a will till I return to India

I think you are absolutely wanted to gather up as it were the American work If you can therefore you ought to come over with me Turiyananda is with me Saradananda s brother is going to Boston In case you cannot come to America I ought to go ought I not?

Yours
VIVEKANANDA

## CXXXVIII

*To Miss Josephine MacLeod*

THE LYMES
WOODSIDES WIMBLEDON
*3rd August 1899*

MY DEAR JOE

We are in at last Turiyananda and I have beautiful lodgings here Saradananda s brother is with Miss Noble and starts Monday next

I have recovered quite a bit by the voyage It was brought about by the exercise on the dumb bells and monsoon storms tumbling the steamer about the waves Queer isn t it? Hope it will remain Where is our Mother the Worshipful Brahmini cow of India? She is with you in New York I think

Sturdy is away Mrs Johnson and everybody Margo is rather worried at that She cannot come to U S till next month Already I have come to love the sea The fish Avatâra is on me I am afraid—good deal of him in me I am sure a Bengali

How is Alberta the old folks and the rest of them? I had a beautiful letter from dear Mrs Brer Rabbit she could not meet us in London she started before we arrived

It is nice and warm here rather too much they say I have become for the present a Shunyavâdi a believer in nothingness or void No plans no afterthought no attempt for anything *laissez faire* to the fullest Well Joe Margo would always take your side on board the steamer whenever I criticised you or the Divine cow Poor child she knows so little! The upshot of the whole is Joe that there cannot be any work in London because you are not here You seem to be my fate! Grind on old lady it is Karma and none can avoid Say I look several years younger by this voyage Only when the heart gives a lurch I feel my age What is this osteo pathy anyway? Will they cut off a rib or two to cure me? Not I no manufacturing of from my ribs sure Whatever it be it will be hard work for him to find my bones My bones are *destined to make corals in the* Ganges Now I am going to study French if you give me a lesson every day but no grammar business—only I will read and you explain in English Kindly give my

love to Abhedananda and ask him to get ready for Turiyananda I will leave with him Write soon

With all love etc
VIVEKANANDA

## CXXXIX

*To Miss Marie Halboister*

C/O MISS NOBLE
21A HIGH STREET WIMBLEDON
*August 1899*

MY DEAR MARIE

I am in London again This time not busy not hustling about but quietly settled down in a corner—waiting to start for the U S America on the first opportunity My friends are nearly all out of London in the country and elsewhere and my health not sufficiently strong

So you are happy in the midst of your lakes and gardens and seclusion in Canada I am glad so glad to know that you are up again on top of the tide May you remain there for ever!

You could not finish the *Raja Yoga* translation yet—all right there is no hurry Time and opportunity must come if it is to be done you know otherwise we vainly strive

Canada must be beautiful now with its short but vigorous summer and very healthy

I expect to be in New York in a few weeks and don t know what next I hope to come back to England next spring

I fervently wish no misery ever came near any one yet it is that alone that gives us an insight into the depths of our lives does it not?

In our moments of anguish gates barred for ever seem to open and let in many a flood of light

We learn as we grow Alas! we cannot use our

knowledge here The moment we seem to learn we are hurried off the stage And this is Mayâ!

This toy world would not be here this play could not go on if we were knowing players We must play blind folded Some of us have taken the part of the rogue of the play some heroic—never mind it is all play This is the only consolation There are demons and lions and tigers and what not on the stage but they are all muzzled They snap but cannot bite The world cannot touch our souls If you want even if the body be torn and bleed ing you may enjoy the greatest peace in your mind

And the way to that is to attain hopelessness Do you know that? Not the imbecile attitude of despair but the contempt of the conqueror for things he has attained for things he struggled for and then throws aside as beneath his worth

This hopelessness desirelessness aimlessness is just the harmony with nature In nature there is no harmony no reason no sequence it was chaos before it is so still

The lowest man is in consonance with nature in his earthy headness the highest the same in the fullness of knowledge All three aimless drifting hopeless—all three happy

You want a chatty letter don t you? I have not much to chat about Mr Sturdy came last two days He goes home in Wales tomorrow

I have to book my passage for N Y in a day or two

None of my old friends have I seen yet except Miss Souter and Max Gysic who are in London They have been very kind as they always were

I have no news to give you as I know nothing of London yet I don t know where Gertrude Orchard is else would have written to her Miss Kate Steel is also away She is coming on Thursday or Saturday

I had an invitation to stay in Paris with a friend a

very well educated Frenchman but I could not go this time I hope another time to live with him some days

I expect to see some of our old friends and say good day to them

I hope to see you in America sure Either I may unexpectedly turn up in Ottawa in my peregrinations or you come to N Y

Good bye all luck be yours

Ever yours in the Lord
VIVEKANANDA

## CXL*

*To Swami Brahmananda*

LONDON
*10th August 1899*

MY DEAR RAKHAL

I got a lot of news from your letter My health was much better on the ship but after landing owing to flatulence it is rather bad now There is a lot of difficulty here—all friends have gone out of town for the summer In addition my health is not so good and there is a lot of inconvenience regarding food etc So in a few days I leave for America Send an account to Mrs Bull as to how much was spent on purchase of land how much on buildings how much on maintenance etc

Sarada writes that the magazine is not going well Let him publish the account of my travels and thoroughly advertise it beforehand—he will have subscribers rushing in Do people like a magazine if three fourths of it are filled with pious stuff? Anyway pay special attention to the magazine Mentally take it as though I were not Act independently on this basis We depend on the elder brother for money learning everything —such an

attitude is the road to ruin If all the money even for the magazine is to be collected by me and all the articles too are from my pen—what will you all do? What are our Sahibs then doing? I have finished my part You do what remains to be done Nobody is there to collect a single penny nobody to do any preaching none has brains enough to take proper care of his own affairs none has the capacity to write one line and all are saints for nothing! If this be your condition then for six months give everything into the hands of the boys —magazine money preaching work etc If they are also not able to do anything then sell off everything and returning the proceeds to the donors go about as mendicants I get no news at all from the Math What is Sharat doing? I want to see work done Before dying I want to see that what I have established as a result of my lifelong struggle is put in a more or less running condition Consult the Committee in every detail regarding money matters Get the signatures of the Committee for every item of expenditure Otherwise you also will be in for a bad name This much is customary that people want some time or other an account of their donations It is very wrong not to have it ready at every turn By such lethargy in the beginning people finally become cheats Make a committee of all those who are in the Math and no expenditure will be made which is not countersigned by them—none at all! I want work I want vigour—no matter who lives or dies What are death and life to a Sannyasin?

If Sharat cannot rouse up Calcutta if you are not able to construct the embankment this year then you will see the fun! I want work—no humbug about it My respectful salutations to the Holy Mother

Yours affectionately
VIVEKANANI

## CXLI

*To Mrs Ole Bull*

RIDGELY MANOR
*4th September 1899*

MY DEAR MOTHER

It is an awful spell of the bad turn of fortune with me last six months Misfortune follows me ever wher ever I go In England Sturdy seems to have got dis gusted with the work he does not see any asceticism in us from India Here no sooner I reach than Olea gets a bad attack

Shall I run up to you? I know I cannot be of much help but I will try my best in being useful

I hope everything will soon come right with you and Olea will be restored to perfect health even before this reaches you Mother knows best that is all about me

Ever yours affectionately
VIVEKANANDA

## CXLII

*To Mr E T Sturdy*

RIDGELY MANOR
*14th September 1899*

MY DEAR STURDY

I have simply been taking rest at the Leggetts and doing nothing Abhedananda is here He has been working hard

He goes in a day or two to resume his work in different places for a month After that he comes to New York to work

I am trying to do something in the line you suggested but don t know how far an account of the Hindus will be appreciated by the Western public when it comes from a Hindu

Mrs Johnson is of opinion that no spiritual person ought to be ill It also seems to her now that my smoking is sinful etc etc That was Miss Muller s reason for leaving me my illness They may be perfectly right for aught I know—and you too—but I am what I am In India the same defects plus eating with Europeans have been taken exception to by many I was driven out of a private temple by the owners for eating with Europeans I wish I were malleable enough to be moulded into whatever one desired but unfortunately I never saw a man who could satisfy every one Nor can any one who has to go to different places possibly satisfy all

When I first came to America they ill treated me if I had not trousers on Next I was forced to wear cuffs and collars else they would not touch me etc etc They thought me awfully funny if I did not eat what they offered etc etc

In India the moment I landed they made me shave my head and wear Kaupin (loin cloth) with the result that I got diabetes etc Saradananda never gave up his underwear—this saved his life with just a touch of rheumatism and much comment from our people

Of course it is my Karma and I am glad that it is so For though it smarts for the time it is another great experience of life which will be useful either in this or in the next

As for me I am always in the midst of ebbs and flows I knew it always and preached always that every bit of pleasure will bring its quota of pain if not with compound interest I have a good deal of love given to me by the world I deserve a good deal of hatred therefore I am glad it is so—as it proves my theory

Every wave having its corresponding dip on my own person

As for me I stick to my nature and principle—once a friend always a friend—also the true Indian principle of looking subjectively for the cause of the objective

I am sure that the fault is mine and mine only for every wave of dislike and hatred that I get It could not be otherwise Thanking you and Mrs Johnson for thus calling me once more to the internal

I remain as ever with love and blessings
VIVEKANANDA

## CXLIII

*To Miss Mary Hale*

RIDGELY MANOR
*September 1899*

MY DEAR MARY

Yes I have arrived I had a letter from Isabelle from Greenacre I hope to see her soon and Harriet Harriet W has been uniformly silent Never mind I will bide my time and as soon as Mr Woolley becomes a millionaire demand my money You did not write any particulars about Mother Church and Father Pope only the news of something about me in some newspapers I have long ceased to take any interest in papers only they keep me before the public and get a sale of my books anyway as you say Do you know what I am trying to do now? Writing a book on India and her people—a short chatty simple something Again I am going to learn French If I fail to do it this year I cannot do the Paris Exposition next year properly Well I expect to learn much French here where even the servants talk it

You never saw Mrs Leggett did you? She is simply grand I am going to Paris next year as their guest as I did the first time

I have now got a monastery on the Ganges for the teaching of philosophy and comparative religion and a centre of work

What have you been doing all this time? Reading? Writing? You did not do anything You could have written lots by this time Even if you had taught me French I would be quite a Froggy now *and you did not* only made me talk nonsense You never went to Green acre I hope it is getting strength every year

Say you 24 feet and 600 lbs of Christian Science you could not pull me up with your treatments I am losing much faith in your healing powers Where is Sam? Bewaring all this time as he could bless his heart such a noble boy!

I was growing grey fast but somehow it got checked I am sorry only a few grey hairs now a research will unearth many though I like it and am going to cultivate a long white goaty Mother Church and Father Pope were having a fine time on the continent I saw a bit on my way home And you have been Cinderella ing in Chicago —good for you Persuade the old folks to go to Paris next year and take you along There must be wonderful sights to see the French are making a last great struggle they say before closing business

Well you did not write me long long You do not deserve this letter but—I am so good you know especially as death is drawing near—I do not want to quarrel with anyone I am dying to see Isabelle and Harriet I hope they have got a great supply of healing power at Green acre Inn and will help me out of my present fall In my days the Inn was well stored with spiritual food and less of material stuff Do you know anything of osteopathy? Here is one in New York working wonders really

good can be done when the main idea is blood sucking On the whole the old regime was better for the people as it *did not* take away everything they had and there was some justice some liberty

A few hundred modernised half educated and denationalised men are all the show of modern English India—*nothing else* The Hindus were 600 million in number according to Ferishta the Mohammedan historian in the 12th century—now less than 200 million

In spite of the centuries of anarchy that reigned during the struggles of the English to conquer the terrible massacre the English perpetrated in 1857 and 1858 and the still more terrible famines that have become the inevitable consequence of British rule (there never is a famine in a native state) and that take off millions there has been a good increase of population but not yet what it was when the country was entirely independent—that is before the Mohammedan rule Indian labour and produce can support five times as many people as there are now in India with comfort if the whole thing is not taken off from them

This is the state of things—even education will no more be permitted to spread freedom of the press stopped already (of course we have been disarmed long ago) the bit of self government granted to them for some years is being quickly taken off We are watching what next! For writing a few words of innocent criticism men are being hurried to *transportation for life* others imprisoned without *any trial* and nobody knows when his head will be off

There has been a reign of terror in India for some years English soldiers are killing our men and outraging our women—only to be sent home with passage and pension at our expense We are in a *terrible* gloom—where is the Lord? Mary you can afford to be optimistic can I? Suppose you simply publish this letter—the law

just passed in India will allow the English Government in India to drag me from here to India and kill me without trial And I know all your Christian Governments will only rejoice because we are heathens Shall I also go to sleep and become optimistic? Nero was the greatest optimistic person! They don t think it worth while to write these terrible things as news items even! If necessary the news agent of *Reuter* gives the exactly opposite news fabricated to order! Heathen murdering is only a legitimate pastime for the Christians! Your missionaries go to preach God and dare not speak a word of truth for fear of the English who will kick them out the next day

*All property and lands granted by the previous* governments for supporting education have been swallow ed up and the present Government spends even less than Russia in education And what education?

The least show of originality is throttled Mary it is hopeless with us unless there really is a God who is the father of all who is not afraid of the strong to protect the weak and who is not bribed by wealth Is there such a God? Time will show

Well I think I am coming to Chicago in a few weeks and talk of things fully! Don t quote your authority

With all love ever your brother
VIVEKANANDA

PS As for religious sects— the B— S— the A— S— and other sects have been useless mixtures they were only voices of apology to our English masters to allow us to live! We have started a *new India—a growth* —waiting to see what comes We believe in new ideas only when the nation wants them and what will be true for us The test of truth for these B— S— is what our masters approve with us what the Indian reasoning and

experience approves The struggle has begun—not between the B— S— and us for they are gone already but a harder deeper and more terrible one

V

## CXLVI

*To Mr E T Sturdy*

C/O F LEGGETT ESQ
RIDGELY MANOR
ULSTER COUNTY N Y

MY DEAR STURDY

Your last letter reached me after knocking about a little through insufficient address

It is quite probable that very much of your criticism is just and correct It is also possible that some day you may find that all this springs from your dislike of certain persons and I was the scapegoat

There need be no bitterness however on that account as I don t think I ever posed for anything but what I am Nor is it ever possible for me to do so as an hour s contact is enough to make everybody see through my smoking bad temper etc Every meeting mu t have a separation —this is the nature of things I carry no feeling of disappointment even I hope you will have no bitterness It is Karma that brings us together and Karma separates

I know how shy you are and how loathe to wound others feelings I perfectly understand months of torture in your mind when you have been struggling to work with people who were so different from your ideal I could not guess it before at all else I could have saved you a good deal of unnecessary mental trouble It is *Karma* again

The accounts were not submitted before as the work is not yet finished and I thought of submitting to my donor a complete account when the whole thing was finished The work was begun only last year as we had to wait for funds a long time and my method is never to ask but wait for voluntary help

I follow the same idea in all my work as I am so conscious of my nature being positively displeasing to many and wait till somebody wants me I hold myself ready also to depart at a moment s notice In the matter of departure thus I never feel bad about it or think much of it as in the constant roving life I lead I am constantly doing it Only so sorry I trouble others without wishing it Will you kindly send over if there is any mail for me at your address?

May all blessings attend you and yours for ever and ever will be the constant prayer of

VIVEKANANDA

## CXLVII

*To Mrs Ole Bull*

C/O E GUERNSEY M D
THE MADRID 180 W 59
*15th November 1899*

MY DEAR MRS BULL

After all I decide to come to Cambridge just now I must finish the stories I began The first one I don t think was given back to me by Margo

My clothes will be ready the day after tomorrow and then I shall be ready to start only my fear is it will be for the whole winter a place for becoming nervous and not for quieting of nerves with constant parties and,

lectures Well perhaps you can give me a room some where where I can hide myself from all the goings on in the place Again I am so nervous of going to a place where indirectly the Indian Math will be The very name of these Math people is enough to frighten me And they are determined to kill with these letters etc

Anyhow I come as soon as I have my clothes—this week You need not come to New York for my sake If you have business of your own that is another matter I had a very kind invitation from Mrs Wheeler of Mont clair Before I start for Boston I will have a turn in in Montclair for a few hours at least

I am much better and am all right nothing the matter with me except my worry and now I am sure to throw that all overboard

Only one thing I want—and I am afraid I cannot get it of you—there should be no communication about me in your letters to India even indirect I want to hide for a time or for all time How I curse the day that brought me celebrity!

With all love
VIVEKANANDA

## CXLVIII

*To Swami Brahmananda*

U S A
*20th November 1899*

MY DEAR RAKHAL

Got some news from Sharat s letter Get ex perience while still there is a chance I am not concerned whether you win or lose I have no disease now

Again I am going to tour from place to place There is no reason for anxiety be fearless Everything will fly away before you only don t be disobedient and all success will be yours Victory to Kâli ! Victory to the Mother ! Victory to Kali ! Wâh Guru Wah Guru ki fateh (Victory unto the Guru) !

Really there is no greater sin than cowardice cowards are never saved—that is sure I can stand everything else but not that Can I have any dealings with one who will not give that up? If one gets one blow one must return ten with redoubled fury then only one is a *man* the coward is an object to be pitied

I bless you all today on this day sacred to the Divine Mother on this night may the Mother dance in your hearts and bring infinite strength to your arms Victory to Kali ! Victory to Kali ! Mother will certainly come down—and with great strength will bring all victory world victory Mother is coming what fear? Whom to fear? Victory to Kali ! At the tread of each one of you the earth will tremble Victory to Kali ! Again onward forward ! Wah Guru ! Victory to the Mother ! Kali ! Kali ! Kali ! Disease sorrow danger weakness—all these have departed from you all All victory all good fortune all prosperity yours Fear not ! Fear not ! The threat of calamity is vanishing fear not ! Victory to Kali ! Victory to Kali !

VIVEKANANDA

PS I am the servant of the Mother you are all servants of the Mother—what destruction what fear is there for us? Don t allow egoism to enter your minds and let love never depart from your hearts What destruction can touch you? Fear not Victory to Kali ! Victory to Kali V

CIL

*To Miss Mary Hale*

1 EAST 39 ST NEW YORK
*20th November 1899*

MY DEAR MARY

I start tomorrow most probably for California On my way I would stop for a day or two in Chicago I send a wire to you when I start Send somebody to the station as I never was so bad as now in finding my way in and out

Ever your brother
VIVEKANANDA

CL

*To Swami Brahmananda*

21 WEST 34 ST
NEW YORK
*21st November 1899*

MY DEAR BRAHMANANDA

The accounts are all right I have handed them over to Mrs Bull who has taken charge of reporting the different parts of the accounts to different donors Never mind what I have said in previous harsh letters They would do you good Firstly they will make you business like in the future to keep regular and clear accounts and get the brethren into it Secondly if these scoldings don t make you brave I shall have no more hopes of you I want to see you die even but you must make a fight Die in obeying commands like a soldier and go to Nirvana but no cowardice

It is necessary that I must disappear for some time Let not any one write me or seek me during that time it is absolutely necessary for my health I am only nervous that is all nothing more

All blessings follow you Never mind my harshness You know the heart always whatever the lips say All blessings on you For the last year or so I have not been in my senses at all I do not know why I had to pass through this hell—and I have I am much better—well in fact Lord help you all I am going to the Himalayas soon to retire for ever My work is done

Ever yours in the Lord
VIVEKANANDA

PS Mrs Bull sends her love
V

## CLI

*To Mrs Ole Bull*

*22nd December 1899*

MY DEAR DHIRA MATA

I have a letter from Calcutta today from which I learn your cheques have arrived a great many thanks and grateful words also came

Miss Souter of London sends me a printed New Year s greetings I think she must have got the accounts you sent her by this time

Kindly send Saradananda s letters that have come to your care

As for me I had a slight relapse of late for which the healer has rubbed several inches of my skin off

Just now I am feeling it the smart I had a very hopeful note from Margo I am grinding on in Pasadena hope some result will come out of my work here Some people here are very enthusiastic the Raja Yoga book did indeed great services on this coast I am mentally very well indeed I never really was so calm as of late The lectures for one thing do not disturb my sleep that is some gain I am doing some writing too The lectures here were taken down by a stenographer the people here want to print them

I learn they are well and doing good work at the Math—from Swami S s letter to Joe Slowly as usual plans are working but Mother knows as I say May She give me release and find other workers for Her plans By the by I have made a discovery as to the mental method of really practising what the Gita teaches of working without an eye to results I have seen much light on concentration and attention and control of concentration which if practised will take us out of all anxiety and worry It is really the *science* of bottling up our minds whenever we like Now what about yourself poor Dhira Mata? This is the result of motherhood and its penalties we all think of ourselves and never of the Mother How are you? How are things going on with you? What about your daughter? about Mrs Briggs?

I hope Turiyananda is completely recovered now and working Poor man suffering is the lot! Never mind there is a pleasure in suffering even when it is for others is there not? Mrs Leggett is doing well so is Joe I—they say I— too am May be they are right I work any way and want to die in harness if that be what Mother wants I am quite content

Ever your son
VIVEKANANDA

## CLII

*To Mrs Ole Bull*

921 W 21ST STREET
LOS ANGELES
*27th December 1899*

BELOVED DHIRA MATA

An eventful and happy New Year to you and many such returns!

I am much better in health—able enough to work once more I have started work already and have sent to Saradananda some money—Rs 1 300 already—as expenses for the law suit I shall send more if they need it I had a very bad dream this morning and had not any news of Saradananda for three weeks Poor boys! How hard I am on them at times Well they know in spite of all that I am their best friend

Mr Leggett has got a little over £500 I had with Sturdy on account of *Raja Yoga* and the Maharaja of Khetri I have now about a thousand dollars with Mr Leggett If I die kindly send that money to my mother I wired to the boys three weeks ago that I was perfectly cured If I don t get any worse this much health as I have now will do well enough Do not worry at all on my account I am up and working with a will

I am sorry I could not write any more of the stories I have written some other things and mean to write some thing almost every day

I am very much more peaceful and find that the only way to keep my peace is to teach others Work is my only safety valve

I only want some clear business head to take care of the details as I push onwards and work on I am afraid it will be a long time to find such in India and if there

seriously ill in Calcutta that I don't know whether he has passed away or not Well good and evil both love company queer they come in strings I had a letter from my cousin telling me her daughter (the adopted little child) was dead Suffering seems to be the lot of India! Good I am getting rather callous rather stilted of late Good Mother knows I am so ashamed of myself—of this display of weakness for the last two years! Glad it is ended

Ever your loving son
VIVEKANANDA

## CLVI

*To Miss Mary Hale*

PASADENA
*20th February, 1900*

MY DEAR MARY

Your letter bearing the sad news of Mr Hale's passing away reached me yesterday I am sorry because in spite of monastic training the heart lives on and the Mr Hale was one of the best souls I met in life Of course you are sorry miserable and so is Mother Church and Harriet and the rest especially as this is the first grief of its kind you have met is it not? I have lost many suffered much and the most curious cause of suffering when somebody goes off is the feeling that I was not good enough to that person When my father died it was a pang for months and I had been so disobedient

You have been very dutiful if you feel anything like that it is only a form of sorrow

Just now I am afraid life begins for you Mary in earnest We may read books hear lectures and talk but experience is the one teacher the[illegible] ere

are any they ought to be educated by somebody from the West

Again I can only work when thrown completely on my own feet I am at my best when I am alone Mother seems to arrange so Joe believes great things are brewing—in Mother s cup hope it is so

Joe and Margot have developed into actual prophets it seems I can only say every blow I had in this life every pang will only become joyful sacrifice if Mother becomes propitious to India once more

*Miss Greenstidel writes a beautiful letter to me about* you most of it She thinks a lot about Turiyananda too *Give Turiyananda my love I am sure he will work well* He has the pluck and stamina

I am going soon to work in California when I leave I shall send for Turiyananda and make him work on the Pacific coast I am sure here is a great field The Raja Yoga book seems to be very well known here Miss Greenstidel has found great peace under your roof and is very happy I am so glad it is so May things go a little better with her every day She has a good business head and practical sense

Joe has unearthed a magnetic healing woman We *are both under her treatment Joe thinks she is pulling* me up splendidly On her has been worked a miracle, she claims Whether it is magnetic healing *California* ozone or the end of the present spell of bad karma I am improving It is a great thing to be able to walk *three* miles even after a heavy dinner

All love and blessings to Olea My love to Dr James and other Boston friends

Ever your son

VIVEKANANDA

## CLIII

*To Miss Mary Hale*

C/O MRS BLODGETT
921 WEST 21ST ST
LOS ANGELES
*27th December 1899*

MY DEAR MARY

Merry Christmas and Happy New Year and many many glorious returns of such for your birthday All these wishes prayers greetings in one breath I am cured you will be glad to know It was only indigestion and no heart or kidney affection quoth the healers nothing more And I am walking three miles a day—after a heavy dinner

Say—the person healing me insisted on my smoking! So I am having my pipe nicely and am all the better for it In plain English the nervousness etc was all due to dyspepsia and nothing more

I am at work too working working not hard but I don t care and I want to make money this time Tell this to Margot especially the pipe business You know who is healing me? No physician no Christian Science healer but a magnetic healing woman who skins me every time she treats me Wonders—she performs operations by rubbing—internal operations too her patients tell me

It is getting late in the night I have to give up writing separate letters to Margot Harriet Isabelle and Mother Church Wish is half the work They all know how I love them dearly *passionately* so you become the medium for my spirit for the time and carry them my New Year s messages

It is exactly like Northern Indian winter here only some days a little warmer the roses are here and the beautiful palms Barley is in the fields roses and many other flowers round about the cottage where I live Mrs Blodgett my host is a Chicago lady—fat old and extremely witty She heard me in Chicago and is very motherly

I am so sorry the English have caught a Tartar in South Africa A soldier on duty outside a camp bawled out that he had caught a Tartar Bring him in was the order from inside the tent He will not come replied the sentry Then you come yourself rang the order again He will not let me come either Hence the phrase to catch a Tartar Don't you catch any

I am happy just now and hope to remain so for all the rest of my life Just now I am Christian Science—no evil and love is a drawing card

I shall be very happy if I can make a lot of money I am making some Tell Margot I am going to make a lot of money and go home by way of Japan Honolulu China and Java This is a nice place to make money quick in and San Francisco is better I hear Has she made any?

You could not get the millionaire Why don't you start for half or one fourth million? Something is better than nothing We want money he may go into Lake Michigan we have not the least objection We had a bit of an earthquake here the other day I hope it has gone to Chicago and raised Isabelle's mud puddle up It is getting late I am yawning so here I quit

Good bye all blessings all love
VIVEKANANDA

## CLIV

*To Mrs Ole Bull*

*17th January 1900*

MY DEAR DHIRA MATA

I received yours with the enclosures for Sarada nanda and there was some good news I hope to get some more news this week You did not write anything about your plans I had a letter from Miss Greenstidel expressing her deep gratitude for your kindness—and who does not? Turiyananda is getting well by this time I hope

I have been able to remit Rs 2 000 to Saradananda with the help of Miss MacLeod and Mrs Leggett Of course they contributed the best part The rest was got by lectures I do not expect anything much here or any where by lecturing I can scarcely make expenses No not even that whenever it comes to paying the people are nowhere The field of lecturing in this country has been overworked the people have outgrown that

I am decidedly better in health The healer thinks I am now at liberty to go anywhere I choose the process will go on and I shall completely recover in a few months She insists on this that I am cured already only nature will have to work out the rest

Well I came here principally for health I have got it in addition I got Rs 2 000 to defray the law expenses Good

Now it occurs to me that my mission from the plat form is finished and I need not break my health again by that sort of work

It is becoming clearer to me that I lay down all the concerns of the Math and for a time go back to my mother She has suffered much through me I must try to smooth her last days Do you know this was just

exactly what the great Shankarâchârya himself had to do! He had to go back to his mother in the last few days of her life! I accept it I am resigned I am calmer than ever The only difficulty is the financial part Well the Indian people owe something I will try Madras and a few other friends in India Anyhow I must try as I have forebodings that my mother has not very many years to live Then again this is coming to me as the greatest of all sacrifices to make the sacrifice of ambition of leadership of fame I am resigned and must do the penance The one thousand dollars with Mr Leggett and if a little more is collected will be enough to fall back upon in case of need Will you send me back to India? I am ready any time Don't go to France without seeing me I have become practical at least compared to the visionary dreams of Joe and Margot Let them work their dreams out for me—they are not more than dreams I want to make out a trust deed of the Math in the names of Saradananda Brahmananda and yourself I will do it as soon as I get the papers from Saradananda Then I am quits I want rest a meal a few books and I want to do some scholarly work Mother shows this light vividly now Of course you were the one to whom She showed it first I would not believe it then But then it is now shown that—leaving my mother was a great renunciation in 1884—it is *a greater renunciation to go back to my mother now* Probably Mother wants me to undergo the same that She made the great Âchârya undergo in old days Is it? I am surer of your guidance than of my own Joe and Margot are great souls but to you Mother is now sending the light for my guidance Do you see light? What do you advise? At least do not go out of this country without sending me home

I am but a child what work have I to do? My powers I passed over to you I see it I cannot any

more *tell* from the platform Don t tell it to anyone—not even to Joe I am glad I want rest not that I am *tired* *but the next phase will be the miraculous touch and not the tongue*—like Ramakrishna s The *word* has gone to you and the voice to Margo No more it is in me I am glad I am resigned Only get me out to India won t you? Mother will make you do it I am sure

Ever your son
VIVEKANANDA

## CLV

*To Mrs Ole Bull*

LOS ANGELES
*15th February 1900*

DEAR DHIRA MATA

Before this reaches you I am off to San Francisco You already know all about the work I have not done much work but my heart is growing stronger every day physically and mentally Some days I feel I can bear everything and suffer everything There was nothing of note inside the bundle of papers sent by Miss Muller I did not write her not knowing her address Then again I am afraid

I can always work better alone and am physically and mentally best when entirely alone! I scarcely had a day s illness during my eight years of lone life away from my brethren Now I am again getting up being alone Strange but that is what Mother wants me to be Wandering alone like the rhinoceros as Joe likes it, I think the conferences are ended Poor Turiyananda suffered so much and never let me know he is and good Poor Niranjan I learn from Mr

seriously ill in Calcutta that I don't know whether he has passed away or not Well good and evil both love company queer they come in strings I had a letter from my cousin telling me her daughter (the adopted little child) was dead Suffering seems to be the lot of India! Good I am getting rather callous rather stilted of late Good Mother knows I am so ashamed of myself—of this display of weakness for the last two years! Glad it is ended

Ever your loving son
VIVEKANANDA

## CLVI

*To Miss Mary Hale*

PASADENA
*20th February, 1900*

MY DEAR MARY

Your letter bearing the sad news of Mr Hale's passing away reached me yesterday I am sorry because in spite of monastic training the heart lives on and then Mr Hale was one of the best souls I met in life Of course you are sorry miserable and so is Mother Church and Harriet and the rest especially as this is the first grief of its kind you have met is it not? I have lost many suffered much and the most curious cause of suffering when somebody goes off is the feeling that I was not good enough to that person When my father died it was a pang for months and I had been so disobedient

You have been very dutiful if you feel anything like that it is only a form of sorrow

Just now I am afraid life begins for you Mary in earnest We may read books hear lectures and talk but experience is the one teacher the one eye

opener It is best as it is We learn through smiles and tears we learn We don t know why but we see it is so and that is enough Of course Mother Church has the solace of her religion I wish we could all dream undisturbed good dreams

You have had shelter all your life I was in the glare burning and panting all the time Now for a moment you have caught a glimpse of the other side My life is made up of continuous blows like that and hundred times worse because of poverty treachery and my own foolishness! Pessimism! You will understand it how it comes Well well what shall I say to you Mary? You know all the talks only I say this and it is true—if it were possible to exchange grief and had I a cheerful mind I would exchange mine for your grief ever and always Mother knows best

Your ever faithful brother
VIVEKANANDA

## CLVII

*To Miss Mary Hale*

1251 PINE STREET
SAN FRANCISCO
*2nd March 1900*

DEAR MARY

Very kind of you to write to invite me to Chicago I wish I could be there this minute But I am busy making money only I do not make much Well I have to make enough to pay my passage home at any rate Here is a new field where I find ready listeners by hundreds prepared beforehand by my books

Of course money making is slow and tedious If I could make a few hundreds I would be only too glad

By this time you must have received my previous note I am coming eastward in a month or six weeks I hope

How are you all? Give Mother my heartfelt love I wish I had her strength she is a true Christian My health is much better but the old strength is not there yet I hope it will come some day but then one had to work so hard to do the least little thing I wish I had rest and peace for a few days at least which I am sure I can get with the sisters at Chicago Well Mother knows best as I say always She knows best The last two years have been specially bad I have been living in mental hell It is partially lifted now and I hope for better days better states All blessings on you and the sisters and Mother Mary you have been always the sweetest notes in my jarring and clashing life Then you had the great good Karma to start without oppressive surroundings I never know a moment s peaceful life It has always been high pressure mentally Lord bless you

Ever your loving brother
VIVEKANANDA

## CLVIII

*To Mrs Ole Bull*

1502 JONES STREET
SAN FRANCISCO
*4th March 1900*

DEAR DHIRA MATA

I have not had a word from you for a month I am in Frisco The people here have been prepared by my writings beforehand and they come in big crowds But it remains to be seen how much of that enthusiasm endures when it comes to paying at the door Rev Benjamin Fay Mills invited me to Oakland and gave me

big crowds to preach to He and his wife have been reading my works and keeping track of my movements all the time I sent the letter of introduction from Miss Thursby to Mrs Hearst She has invited me to one of her musicals Sunday next

My health is about the same don t find much difference it is improving perhaps but very impercep tibly I can use my voice however to make *3 000* people hear me as I did twice in Oakland and get good sleep too after two hours of speaking

I learn Margot is with you When are you sailing for France? I will leave here in April and go to the East I am very desirous of getting to England in May if I can Must not go home before trying England once more

I had nice letters from Brahmananda and Sarada nanda they are all doing well They are trying to bring the municipality to its senses I am glad In this world of Maya one need not injure but spread the hood without striking That is enough

Things must get round if they don t it is all right I have a very nice letter from Mrs Sevier too They are doing fine in the mountains How is Mrs Vaughan? When is your conference to close? How is Turiyananda?

With everlasting love and gratitude

Your son
VIVEKANANDA

## CLIX

*To Mrs Ole Bull*

1502 JONES STREET
SAN FRANCISCO
*7th March 1900*

DEAR DHIRA MATA

Your letter enclosing one from Saradananda only and the accounts came I am very much reassured by all the

news I since received from India As for the accounts and the disposal of the Rs 30 000 do just what you please

I have given over the management to you the Master will show you what is best to do The money is Rs 35 000 the Rs 5 000 for building the cottage on the Ganges I wrote to Saradananda not to use just now I have already taken Rs 5 000 of that money I am not going to take more I had paid back Rs 2 000 or more of that Rs 5 000 in India But it seems Brahmananda wanting to show as much of the Rs 35 000 intact as he could drew upon my Rs 2 000 so I owe them Rs 5 000 still on that score Anyway I thought I could make money here in California and pay them up quietly

Now I have entirely failed in California financially It is worse here than in Los Angeles They come in crowds when there is a free lecture and very few when there is something to pay I have some hopes yet in England It is necessary for me to reach England in May There is not the least use in breaking my health in San Francisco for nothing Moreover with all Joe s enthusiasm I have not yet found any real benefit from the magnetic healer except a few red patches on my chest from scratching! Platform work is nigh gone for me and forcing it is only hastening the end I leave here very soon as soon as I can make money for a passage I have 300 dollars in hand made in Los Angeles I will lecture here next week and then I stop As for the Math and the money the sooner I am released of that burden the better

I am ready to do whatever you advise me to do You have been a real mother to me You have taken up one of my great burdens on yourself—I mean my poor cousin I feel quite satisfied As for my mother I am going back to her—for my last days and hers The thousand dollars I have in New York will bring Rs 9 a month then I

bought for her a bit of land which will bring about Rs 6 and her old house—that will bring say Rs 6 I leave the house under litigation out of consideration as I have not got it Myself my mother my grandmother and my brother will live on Rs 20 a month easy I would start just now if I could make money for a passage to India without touching the 1 000 dollars in New York

Anyhow I will scrape three or four hundred dollars—400 dollars will be enough for a second class passage and for a few weeks stay in London I do not ask you to do anything more for me I do not want it What you have done is more ever so much more than I deserve I have given my place solemnly to you in Shri Ramakrishna s work I am out of it All my life I have been a torture to my poor mother Her whole life has been one of continuous misery If it be po sible my last attempt should be to make her a little happy I have planned it all out I have served the *Mother* all my life It is done I refuse now to grind Her axe Let Her find other workers—I strike

You have been one friend with whom Shri Rama krishna has become the goal of life—that is the secret of my trust in you Others love me personally But they little dream that what they love me for is Rama krishna leaving Him I am only a mass of foolish selfish emotions Anyway this stress is terrible thinking of what may come next wishing what ought to come next I am unequal to the responsibility I am found wanting I must give up this work If the work has not life in it let it die if it has it need not wait for poor workers like myself

Now the money Rs 30 000 is in my name in Government Securities If they are sold now we shall lose fearfully on account of the war then how can they be sent over here without being sold there? To sell them there I must sign them I do not know how all this is

going to be straightened out Do what you think best about it all In the meanwhile it is absolutely necessary that I execute a will in your favour for everything in case I suddenly die Send me a draft will as soon as possible and I shall register it in San Francisco or Chicago then my conscience will be safe I don't know any lawyer here else I would have got it drawn up neither have I the money The will must be done *immediately* the trust and things have time enough for them

Ever your son
VIVEKANANDA

## CLX

*To Miss Josephine MacLeod*

1502 JONES STREET
SAN FRANCISCO
*7th March 1900*

DEAR JOE

I learn from Mrs Bull's letter that you are in Cambridge

I also learn from Miss Helen that you did not get the stories sent on to you I am sorry Margot has copies she may give you I am so so in health No money Hard work No result Worse than Los Angeles

They come in crowds when the lecture is free—when there is payment they don't That's all I have a relapse—for some days—and am feeling very bad I think lecturing every night is the cause I hope to do something in Oakland at least to work out my passage to New York where I mean to work for my passage to India I may go to London if I make money here to pay a few months lodging there

Will you send me our General s address? Even the name slips from memory now!

Good bye May see you in Paris may not Lord bless you you have done for me more than I ever deserve

With infinite love and gratitude

Yours
VIVEKANANDA

## CLXI*

*To Swami Brahmananda*

SAN FRANCISCO
*12th March 1900*

MY DEAR RAKHAI

I got a letter from you some time ago A letter from Sharat reached me yesterday I saw a copy of the invitation letters for the birthday anniversary of Gurudeva (Divine Master) I am frightened hearing that Sharat is troubled by rheumatism Alas sickness sorrow and pain have been my companions for the last two years Tell Sharat that I am not going to work so hard any more But he who does not work enough to earn his food will have to starve to death! I hope Durgaprasanna has done by this time whatever was necessary for the compound wall The raising of a compound wall is not after all a difficult thing If I can I shall build a small house there and serve my old grandmother and mother Evil actions leave none scotfree Mother never spares any body I admit my actions have been wrong Now brother all of you are Sadhus and great saints kindly pray to the Mother that I do not have to shoulder all this trouble and burden any longer Now I desire a little peace—it seems there is no more strength left to bear the burden of work and responsibility—rest and peace for the few days that I shall yet live! Victory to the Guru! Victory to the Guru! No more 'or anything of that sort Peace!

As soon as Sharat sends the trust deed of the Math I shall put my signature to it You all manage—truly I require rest This disease is called neurasthenia a disease of the nerves Once it comes it continues for some years But after a complete rest for three or four years it is cured This country is the home of the disease and here it has caught me However it is not only no fatal disease but it makes a man live long Don't be anxious on my account I shall go on rolling But there is only this sorrow that the work of Gurudeva is not progressing there is this regret that I have not been able to accomplish anything of his work How much I abuse you all and speak harshly! I am the worst of men! Today on the anniversary of his birthday put the dust of your feet on my head—and my mind will become steady again Victory to the Guru! Victory to the Guru! You are my only refuge—you are my only refuge! Now that my mind is steady let me tell you that this resignation is the permanent attitude of my mind All other moods that come are you should know only disease Please don't allow me to work at all any longer Now I shall quietly do Japa and meditation for some time—nothing more Mother knows all else Victory to the Mother of the Universe!

Yours affectionately
VIVEKANANDA

## CLXII

*To Miss Mary Hale*

1719 TURK STREET
SAN FRANCISCO
*12th March 1900*

DEAR MARY

How are you? How is Mother and the sisters? How are things going on in Chicago? I am in Frisco

and shall remain here for a month or so I start for Chicago early in April I shall write to you before that of course How I wish I could be with you for a few days one gets tired of work so much My health is so so but my mind is very peaceful and has been so for some time I am trying to give up all anxiety unto the Lord I am only a worker My mission is to obey and work He knows the rest

Giving up all vexations and paths do thou take refuge unto Me I will save you from all dangers (Gita XVIII 66)

I am trying hard to realise that May I be able to do it soon

Ever your affectionate brother
VIVEKANANDA

## CLXIII

*To Mrs Ole Bull*

1719 TURK STREET
SAN FRANCISCO
*12th March 1900*

MY DEAR DHIRA MATA

Your letter from Cambridge came yesterday Now I have got a fixed address 1719 Turk Street San Francisco Hope you will have time to pen a few lines in reply to this I had a manuscript account sent me by you I sent it back as you desired besides that I had no other accounts They are all right I had a nice letter from Miss Souter from London She expects to have Mr to dine with her

So glad to hear of Margot s success I have given her over to you and am sure you will take care of her I will be here a few weeks more and then go East I am only waiting for the warm season

I have not been at all successful financially here but am not in want Anyway things will go on as usual with me I am sure and if they don t what then? I am perfectly resigned I had a letter from the Math they had the Utsava yesterday I do not intend to go by the Pacific Don t care where I go and when Now perfectly resigned Mother knows a great change peacefulness is coming on me Mother I know will see to it I die a Sannyasin You have been more than mother to me and mine All love all blessings be yours for ever is the constant prayer of

VIVEKANANDA

PS Kindly tell Mrs Leggett that my address for some weeks now will be 1719 Turk Street San Francisco
V

## CLXIV

*To Miss Mary Hale*

*1719* TURK STREET
SAN FRANCISCO
*22nd March 1900*

MY DEAR MARY

Many thanks for your kind note You are correct that I have many other thoughts to think besides Indian people but they have all to go to the background before the all absorbing mission—my Master s work

I would that this sacrifice were pleasant It is not and naturally makes one bitter at times for know Mary I am yet a man and cannot wholly forget myself hope I shall some time Pray for me

Of course I am not to be held responsible for Miss MacLeod s or Miss Noble s or anybody else s views

regarding myself or anything else am I? You never found me smart under criticism

I am glad you are going over to Europe for a long period Make a long tour you have been long a house dove

As for me I am tired on the other hand of eternal tramping that is why I want to go back home and be quiet I do not want to work any more My nature is the retirement of a scholar I never get it! I pray I will get it now that I am all broken and worked out Whenever I get a letter from Mrs Sevier from her Himalayan home I feel like flying off to the Himalayas I am really sick of this platform work and eternal trudging and seeing new faces and lecturing

You need not bother about getting up classes in Chicago I am getting money in Frisco and will soon make enough for my passage home

How are you and the sisters? I expect to come to Chicago some time towards the first part of April

Yours
VIVEKANANDA

## CLXV

*To Miss Mary Hale*

1719 TURK STREET
SAN FRANCISCO
*28th March 1900*

WELL BLESSED MARY

This is to let you know I am very happy Not that I am getting into a shadowy optimism but my power of suffering is increasing I am being lifted up above the pestilential miasma of this world s joys and sorrows they are losing their meaning It is a land of dreams

does not matter whether one enjoys or weeps they are but dreams and as such must break sooner or later How are things going on with you folks there? Harriet is going to have a good time at Paris I am sure to meet her over there and *parler francais*! I am getting by heart a French *dictionnaire*! I am making some money too hard work morning and evening yet better for all that Good sleep good digestion perfect irregularity

You are going to the East I hope to come to Chicago before the end of April If I can t I will surely meet you in the East before you go

What are the McKindley girls doing? Eating grape fruit concoctions and getting plump? Go on life is but a dream Are you not glad it is so? My! They want an eternal heaven! Thank God nothing is eternal except Himself He alone can bear it I am sure Eternity of nonsense!

Things are beginning to hum for me they will presently roar I shall remain quiet though all the same Things are not humming for you just now I am so sorry that is I am trying to be for I cannot be sorry for anything any more I am attaining peace that passeth understanding which is neither joy nor sorrow but some thing above them both Tell Mother that My passing through the valley of death physical mental last two years has helped me in this Now I am nearing that *Peace* the eternal silence Now I mean to see things as they are everything in that peace perfect in its way He whose joy is only in himself whose desires are only in himself he has *learned* his lessons This is the great lesson that we are here to learn through myriads of births and heavens and hells—that there is nothing to be asked for desired for beyond one s Self The greatest thing I can obtain is my Self I am free therefore I require none else for my happiness Alone through

eternity because I was free am free and will remain free for ever This is Vedantism I preached the theory so long but oh joy! Mary my dear sister I am realising it now every day Yes I am I am free Alone alone I am the one without a second

Ever yours in the Sat Chit Ananda
VIVEKANANDA

PS Now I am going to be truly Vivekananda Did you ever enjoy evil! Ha! ha! you silly girl all is good! Nonsense Some good some evil I enjoy the good and I enjoy the evil I was Jesus and I was Judas Iscariot both my play my fun So long as there are two fear shall not leave thee Ostrich method? Hide your heads in the sand and think there is nobody seeing you! All is good! Be brave and face everything come good come evil both welcome both of you my play I have no good to attain no ideal to clench up to no ambition to fulfil I the diamond mine am playing with pebbles good and evil good for you evil come good for you good you come too If the universe tumbles round my ears what is that to me? I am Peace that passeth understanding understanding only gives us good or evil I am beyond I am peace

V

## CLXVI*

*To Swami Turiyananda*

SAN FRANCISCO
*March 1900*

DEAR HARIBHAI

I have just received a bill of lading from Mrs Banerji She has sent some Dâl (pulses) and rice I am

sending the bill of lading to you Give it to Miss Waldo she will bring all these things when they come

Next week I am leaving this place for Chicago thence I go over to New York I am getting on some how Where are you putting up now? What are you doing?

Yours affectionately
VIVEKANANDA

## CLXVII

*To Miss Josephine MacLeod*

1719 TURK STREET
SAN FRANCISCO
*30th March 1900*

MY DEAR JOE

Many thanks for the prompt sending of the books They will sell quick I believe You have become worse than me in changing your plans I see I wonder why I have not got any *Awakened India* yet My mail is getting so knocked about I am afraid

I am working hard—making some money—and am getting better in health Work morning and evening go to bed at 12 p m after a heavy supper!—and trudge all over the town! And get better too!

So Mrs Milton is there give her my love will you? Has not Turiyananda s leg got all right?

I have sent Margot s letter to Mrs Bull as she wanted I am so happy to learn of Mrs Leggett s gift to her Things have got to come round anyway they are bound to because nothing is eternal

I will be a week or two more here if I find it paying

then go to a place near by called Stockton and then—I don t know Things are going anyhow

I am very peaceful and quiet and things are going anyway—just they go With all love

VIVEKANANDA

PS Miss Waldo is just the person to undertake editing *Karma Yoga* with additions etc

V

## CLXVIII*

*To Swami Turiyananda*

DEAR HARIBHAI

I am glad to hear that your leg is all right and that you are doing splendid work My body is going on all right The thing is I fall ill when I take too much precaution I am cooking eating whatever comes working day and night and I am all right and sleeping soundly!

I am going over to New York within a month Has Sarada s magazine gone out of circulation? I am not getting it any longer *Awakened* also has gone to sleep I think They are not sending it to me any more Let that go There is an outbreak of plague in our country who knows who is alive and who is dead! Well a letter from Achu has come today He had hidden himself in the town of Ramgarh in Sikar State Someone told him that Vivekananda was dead so he has written to me! I am sending him a reply

All well here Hope this finds you and all others well

Yours affectionately
VIVEKANANDA

*To Miss Josephine MacLeod*

1719 TURK STREET
SAN FRANCISCO CALIF
*April 1900*

e before you start for France Are you
land? I had a beautiful letter from Mrs
:h I find that Miss Muller sent simply a
any other words to Kali who was with her

is the name of her nephew and he is in
war that is the reason she underlined that
nephew fighting the Boers in Transvaal
I cannot understand it any more now than
e

cally worse than at Los Angeles mentally
tronger and peaceful Hope it will con

got a reply to my letter to you I expect

letter of mine was directed by mistake
r it came all right to me in the end I
from Saradananda they are doing beauti
The boys are working up well scold
es you see it makes them up and doing
have been so dependent for so long that
sorry a good lot of tongue to make them
the laziest fellows had taken charge of
this year and pulled it through They
id are successfully working famine works

by themselves without my help All this comes from the terrific scolding I have been giving sure!

They are standing on their own feet I am so glad See Joe the Mother is working

I sent Miss Thursby s letter to Mrs Hearst She sent me an invitation to her musical I could not go I had a bad cold So that was all Another lady for whom I had a letter from Miss Thursby an Oakland lady did not reply I don t know whether I shall make enough in Frisco to pay my fare to Chicago! Oakland work has been successful I hope to get about $100 from Oakland that is all After all I am content It is better that I tried Even the magnetic healer had not anything for me Well things will go on anyhow for me I do not care how I am very peaceful I learn from Los Angeles Mrs Leggett has been bad again I wired to New York to learn what truth was in it I will get a reply soon I expect

Say how will you arrange about my mail when the Leggett s are over on the other side? Will you so arrange that they reach me right?

I have nothing more to say all love and gratitude is yours already you know that You have already done more than I ever deserved I don t know whether I go to Paris or not but I must go to England sure in May I must not go home without trying England a few weeks more With all love

Ever yours in the Lord
VIVEKANANDA

PS Mrs Hansborough and Mrs Appenul have taken a flat for a month at 1719 Turk Street I am with them and shall be a few weeks V

*To Mrs Ole Bull*

1719 TURK STREET
SAN FRANCISCO
*1st April 1900*

MATA

ıd note came this morning I am so happy
all the New York friends are being cured by
She has been very unsuccessful it seems
es as all the people we introduced tell me
a worse state than before the skin paring
Mrs Milton my love her rubbings used
od at the time at least Poor Dr Hiller!
over post haste to Los Angeles to get his
You ought to have seen him the other
heard him too! Mrs Hiller it appears is
vorse for all the rubbings given and she is
ones and above all the doctor had to spend
Los Angeles That makes him feel very bad
would not write this to Joe she is happy
ıs of having done so much good to poor
t oh if she could hear the Los Angeles
s old Dr Hiller she would change her mind
learn wisdom from an old adage not to
nedicine to any one I am so glad I did not
Dr Hiller s alacrity in getting over to Los
n he heard of this cure from Joe She ought
the old man dance about my room with
ty! 500 dollars was too much for the old
German he dances about slaps his pockets
'ou can th have goth the five hundred buth
cure!
ere are poor people who paid her *three*
bing sometimes and now complimenting Joe

and myself Don t tell this to Joe You and she can afford to lose money on any one So also the old German doctor but the poor boy finds it a bit hard The old doctor is now persuaded that some *devils* are misarranging his affairs of late He has counted on so much to have me as his guest and his wife righted but he had to run to Los Angeles and that upset the whole plan and now though he tries his best to get me in as his guest I fight shy not of him but of his wife and sister in law He is sure Devils must be in it he has been a Theosophical student I told him to write to Miss MacLeod to hunt up a devil driver somewhere so that he might run with his wife and spend another five hundred! Doing good is not always smooth!

As for me I get the fun out of it—as long as Joe pays—bone cracker or skin parer or any system whatever But this was not fair of Joe—after having got in all these people to get rubbed down to run off and let me bear all the compliments! I am glad she is not introducing any outsiders to be skinned Otherwise Joe would be gone to Paris leaving poor Mr Leggett to collect the compliments I sent in a Christian Science healer to Dr Hiller as a make up of Joe s misdemeanour but his wife slammed the door in her face and would have nothing to do with queer healing

Anyhow I sincerely hope and pray Mrs Leggett will be well this time Did they analyse the sting?

I hope the will will arrive soon I am a bit anxious about it I expected to get a draft trust deed also by this mail from India no letters came not even *Awakened India* though I find *Awakened India* has reached San Francisco

I read in the papers the other day of 500 deaths in one week of plague in Calcutta! Mother knows what is good

So Mr Leggett has got the V Society up Good

How is Olea? Where is Margot? I wrote her a letter the other day to 21 W 34 N Y I am so happy that she is making headway With all love

Ever your son
VIVEKANANDA

PS I am getting all the work I can do and more I will make my passage anyhow Though they cannot pay me much yet they pay some and by constant work I will make enough to pay my way and have a few hundred in the pocket anyhow So you needn t be the least anxious about me V

## CLXXI

*To Sister Nivedita*

U S A
*6th April 1900*

DEAR MARGOT

Glad you have returned Gladder you are going to Paris I shall go to Paris of course only don t know when Mrs Leggett thinks I ought to immediately and take up studying French Well take what comes So you do too

Finish your books and in Paris we are going to conquer the Froggies How is Mary? Give her my love My work here is done I will come in fifteen days to Chicago if Mary is there She is going away to the East soon With blessings

VIVEKANANDA

PS The mind is omnipresent and can be heard and felt anywhere V

## CLXXII

*To an American friend*

SAN FRANCISCO
*7th April 1900*

I am more calm and quiet now than I ever was I am on my own feet working hard and with pleasure To work I have the right Mother knows the rest

You see I shall have to stay here longer than I intended and work But don t be disturbed I shall work out all my problems I am on my own feet now and I begin to see the light Success would have led me astray and I would have lost sight of the truth that I am a Sannyasin That is why Mother is giving me this experience

My boat is nearing the calm harbour from which it is never more to be driven out Glory glory unto Mother! I have no wish no ambition now Blessed be Mother! I am the servant of Ramakrishna I am merely a machine I know nothing else Nor do I want to know Glory glory unto Shri Guru!

## CLXXIII

*To Mrs Ole Bull*

1719 TURK STREET
SAN FRANCISCO
*8th April 1900*

MY DEAR DHIRA MATA

Here is a long letter from A—— He seems to be entirely upset I am sure a little kindness will completely win him over He thinks that you want to drive

him out of New York etc He awaits my orders I have told him to trust you in everything and remain in New York till I come

I think as things stand in New York they require my presence Do you? In that case I shall come over soon

I have been making enough money to pay my passage I will stop on my way at Chicago and Detroit

Of course by that time you will be off A—— has done good work so far and of course you know I do not meddle with my workers at all

The man who can work has an individuality of his own and resists any pressure there That is my reason in leaving workers entirely free Of course you are on the spot and know best Advise me what to do

The remittance to Calcutta has duly reached I got news of it by this mail My cousin sends her respects and thanks but she is sorry she cannot write English

I am getting better every day and even walking uphill There are falls now and then but the duration is decreasing constantly My thanks to Mrs Milton

I had a little note from Sri Gryanander Poor girl she is so thankful to be trusted That is just like Mrs Leggett—good good good Money is not evil after all —in good hands I hope fervently Sri will completely recover poor child

I will leave here in about two weeks I go to a place called Star Klon and then start for the East It may be I may go to Denver also With all love to Joe

Ever your son
VIVEKANANDA

PS I do not any more doubt my ultimate cure you ought to see me working like a steam engine cook

ing eating anything and everything and all the same sleeping well and keeping well!

I have not done any writing—no time I am so glad Mrs Leggett is much better and walking about naturally I expect her complete recovery soon and pray for it

V

PS I had a nice letter from Mrs Sevier they are going on splendidly with the work Plague has broken out severely at Calcutta but no hullabaloo over it this time V

PS Did you reveal to A—— that I have given over to you the charge of the entire work? Well you know best how to do things but he seems to be hurt at that

V

## CLXXIV

*To Miss Josephine MacLeod*

1719 TURK STREET
SAN FRANCISCO
*10th April 1900*

DEAR JOE

There is a squabble in New York I see I got a letter from A—— stating that he was going to leave New York He thought Mrs Bull and you have written lots against him to me I wrote him back to be patient and wait and that Mrs Bull and Miss MacLeod wrote only good things about him

Well Joe Joe you know my method in all these rows to leave all rows alone! Mother sees to all such things I have finished my work I am retired Joe Mother will work now Herself That is all

Now as you say I am going to send all the

I have made here I could do it today b
to make it a thousand I expect to mak
Frisco by the end of this week I will
New York and send it or ask the bank t
do it

I have plenty of letters from the
Himalayan centre This morning car
Swarupananda Yesterday one from Mrs

I told Mrs Hansborough about the pl
Mr Leggett from me to do what is best abo
Society matter

The only thing I see is that in every c
to follow its own method As such if I we
convene a meeting of all the members an
and ask them what they want to do Whe
to organise or not what sort of organisa
if any etc But Lordy do it on your ow
quits Only if you think my presence wo
help I can come in fifteen days I hav
work here only out of San Francisco
little city I want to work a few days in t
I think I should rest now although I car
week average in this city all along Th
to let upon New York the charge of the
With all love

Ever yours

PS If the workers are all averse to
you think there is any benefit in it? Yo
Do what you think best I have a letter
from Chicago She asks some questions I

## CLXXV

*To an American friend*

ALAMEDA CALIFORNIA
*12th April 1900*

Mother is becoming propitious once more Things are looking up They must

Work always brings evil with it I have paid for the accumulated evil with bad health I am glad My mind is all the better for it There is a mellowness and a calmness in life now which was never there before I am learning now how to be detached as well as attached and mentally becoming my own master

Mother is doing Her own work I do not worry much now Moths like me die by the thousand every instant Her work goes on all the same Glory unto Mother! Alone and drifting about in the will current of the Mother has been my whole life The moment I have tried to break this that moment I have been hurt Her will be done!

I am happy at peace with myself and more of the Sannyasin than I ever was before The love for my own kith and kin is growing less every day and that for Mother increasing Memories of long nights of vigil with Shri Ramakrishna under the Dakshineswar Banyan are waking up once more And work? What is work? Whose work? Whom shall I work for?

I am free I am Mother's child She works She plays Why should I plan? What should I plan? Things came and went just as She liked without my planning We are Her automata She is the wirepuller

## CLXXVI

*To Miss Josephine MacLeod*

ALAMEDA CALIFORNIA
*20th April 1900*

MY DEAR JOE

Received your note today I wrote you one yester day but directed it to England thinking you will be there

I have given your message to Mrs Betts I am so sorry this little quarrel came with A—— I got also his letter you sent He is correct so far as he says Swami wrote me Mr Leggett is not interested in Vedanta and will not help any more You stand on your own feet It was as you and Mrs Leggett desired me to write him from Los Angeles about New York—in reply to his asking me what to do for funds

Well things will take their own shape but it seems in Mrs Bull's and your mind there is some idea that I ought to do something But in the first place I do not know anything about the difficulties None of you write me anything about what that is for and I am no thought reader

You simply wrote me a general idea that A—— wanted to keep things in his hands What can I under stand from it? What are the difficulties? Regarding what the differences are about I am as much in the dark as about the exact date of the Day of Destruction!

And yet Mrs Bull's and your letters show quite an amount of vexation!

These things get complicated sometimes in spite of ourselves Let them take their shape

I have executed and sent the will to Mr Leggett as desired by Mrs Bull

I am going on sometimes well and at other times ill I cannot say on my conscience that I have been the

least benefited by Mrs Milton She has been good to me I am very thankful My love to her Hope she will benefit others

For writing to Mrs Bull this fact I got a four page sermon as to how I ought to be grateful and thankful etc etc

All that is sure the outcome of this A—— business!

Sturdy and Mrs Johnson got disturbed by Margot and they fell upon me Now A—— disturbs Mrs Bull and of course I have to bear the brunt of it Such is life!

You and Mrs Leggett wanted me to write him to be free and independent and that Mr Leggett was not going to help them I wrote it—now what can I do?

If John or Jack does not obey you am I to be hanged for it? What do I know about this Vedanta Society? Did I start it? Had I any hand in it?

Then again nobody condescends to write me any thing about what the affair is!

Well this world is a great fun

I am glad Mrs Leggett is recovering fast I pray every moment for her complete recovery I start for Chicago on Monday A kind lady has given me a pass up to New York to be used within three months The Mother will take care of me She is not going to strand me now after guarding me all my life

Ever yours gratefully
VIVEKANANDA

## CLXXVII

*To Miss Mary Hale*

*23rd April 1900*

MY DEAR MARY

I ought to have started today but circumstances s(

happened that I cannot forgo the temptation to be in a camp under the huge red wood trees of California before I leave Therefore I postpone it for three or four days Again after the incessant work I require a breath of God's free air before I start on this bone breaking journey of four days

Margot insists in her letter that I must keep my promise to come to see Aunt Mary in fifteen days It will be kept—only in twenty days instead of fifteen By that I avoid the nasty snowstorm Chicago had lately and get a little strength too

Margot is a great partisan of Aunt Mary it seems and other people besides me have nieces and cousins and aunts

I start tomorrow to the woods Woof! get my lungs full of ozone before getting into Chicago In the meanwhile keep my mail for me when it comes to Chicago and don't send it off here like a good girl as you are

I have finished work Only a few days rest my friends *insist—three or four—before facing the railway*

I have got a free pass for three months from here to New York *no expense except the sleeping car* so you see free free!

Yours affectionately
VIVEKANANDA

## CLXXVIII

*To Miss Mary Hale*

*30th April 1900*

MY DEAR MARY

Sudden indisposition and fever prevent my *starting for Chicago yet I will start as soon as I am strong for the* journey I had a letter from Margot *the other day* Give her kindly my love and know yourself my eternal love

Where is Harriet? Still in Chicago? And the McKindley sisters? To all my love

VIVEKANANDA

## CLXXIX

*To Sister Nivedita*

*2nd May 1900*

MY DEAR NIVEDITA

I have been very ill—one more relapse brought about by months of hard work

Well it has shown me that I have no kidney or heart disease whatsoever only overworked nerves

I am therefore going today in the country for some days till I completely recover which I am sure will be in a few days

In the meanwhile I do not want to read any India letters with the plague news etc My mail is coming to Mary either she or you keep them (you if she goes away) till I return

I am going to throw off all worry and glory unto Mother

Mrs C P Huntington a very very wealthy lady who has helped me came wants to see and help you She will be in New York by the first of June Do not go away without seeing her If I cannot come early enough I will send you an introduction to her

Give my love to Mary I am leaving here in a few days

Ever yours with blessings

VIVEKANANDA

PS The accompanying letter is to introduce you to Mrs M C Adams wife of Judge Adams Go to see her immediately Much good may come out of it She is well known find out her address V

## CLXX

*To Sister Nivedita*

SAN FRANCISCO
*26th May 1900*

DEAR NIVEDITA

All blessings on you Don't despond in the least *Shri wah Guru! Shri wah Guru!* You come of the blood of a Kshatriya Our yellow garb is the robe of death on the field of battle Death for the cause is our goal not success *Shri wah Guru!*

Black and thick are the folds of sinister fate But I am the master I raise my hand and lo they vanish! All this is nonsense and fear I am the Fear of fear the Terror of terror I am the fearless secondless One I am the Ruler of destiny the Wiper out of fact *Shri wah Guru!* Steady child don't be bought by gold or any thing else and we win!

VIVEKANANDA

## CLXXXI

*To Miss Mary Hale*

1921 W 21 STREET
LOS ANGELES
*17th June 1900*

MY DEAR MARY

It is true I am much better but not yet completely recovered anyway the complexion of the mind is one belonging to everyone that suffers It is neither gas nor *anything else*

Kali worship is not a necessary step in any religion The Upanishads teach us all there is of religion Kali worship is my special *fad* you never heard me preach

it or read of my preaching it in India I only preach what is good for universal humanity If there is any curious method which applies entirely to me I keep it a secret and there it ends I must not explain to you what Kali worship is as I never taught it to anybody

You are entirely mistaken if you think the Boses are rejected by the Hindu people The English rulers want to push him into a corner They don t of course like that sort of development in the Indian race They make it hot for him that is why he seeks to go elsewhere

By the anglicised are meant people who by their manners and conduct show that they are ashamed of us poor old type Hindus I am not ashamed of my race or my birth or nationality That such people are not liked by the Hindus I cannot wonder

Ceremonials and symbols etc have no place in our religion which is the doctrine of the Upanishads pure and simple Many people think the ceremonial etc help them in realising religion I have no objection

Religion is that which does not depend upon books or teachers or prophets or saviours and that which does not make us dependent in this or in any other lives upon others In this sense Advaitism of the Upanishads is the only religion But saviours books prophets cere monials etc have their places They may help many as Kali worship helps me in my *secular work* They are welcome

The Guru however is a different idea It is the rela tion between the transmitter and the receiver of force— psychic power and knowledge Each nation is a type physically and mentally Each is constantly receiving ideas from others only to work it out *into* its type that is along the national line The time has not come for the destruction of types All education from any source is

compatible with the ideals in every country only they must be nationalised i e fall in line with the rest of the type manifestation

Renunciation is always the ideal of every race only other races do not know what they are made to do by nature unconsciously Through the ages one purpose runs sure And that will be finished with the destruction of this earth and the sun! And worlds are always in progress indeed! And nobody as yet developed enough in any one of the infinite worlds to communicate with us! Bosh! They are born show the same phenomena and die the same death! Increasing purpose! Babies! Live in the land of dreams you babies!

Well now about me You must persuade Harriet to give me a few dollars every month and I will have some other friends do the same If I succeed I fly off to India I am dead tired of the platform work for a living It does not please me any more I retire and do some writing if I can do some scholarly work

I am coming soon to Chicago hope to be there in a few days Say would not Mrs Adams be able to get up a class for me to pay my passage back?

Of course I shall try different places So much of optimism has come to me Mary that I should fly off to the Himalayas if I had wings

I have worked for this world Mary all my life and it does not give me a piece of bread without taking a pound of flesh

If I can get a piece of bread a day I retire entirely but this is impossible—this is the increasing purpose that is unfolding all the devilish inwardness as I am getting older!

Ever yours in the Lord
VIVEKANANDA

PS If ever a man found the vanity of things I have it now This is the world hideous beastly corpse Who thinks of helping it is a fool! But we have to work out our slavery by doing good or evil I have worked it out I hope May the Lord take me to the other shore! Amen! I have given up all thoughts about India or any land I am now selfish want to save myself!

He who revealed unto Brahmâ (the first of the gods) the Vedas who is manifest in every heart unto Him I take refuge hoping deliverance from bondage

V

## CLXXXII

*To Miss Mary Hale*

VEDANTA SOCIETY
146 E 55TH STREET
NEW YORK
*23rd June 1900*

MY DEAR MARY

Many many thanks for your beautiful letter I am very well and happy and same as ever Waves must come before a rise So with me I am very glad you are going to pray Why don t you get up a Methodist camp meeting? That will have quicker effect I am sure

I am determined to get rid of all sentimentalism and emotionalism and hang me if you ever find me emo tional I am the Advaitist our goal is *knowledge*—no feelings no love as all that belongs to matter and super stition and bondage I am only existence and knowl edge

Greenacre will give you good rest I am sure I wish you all joy there Don t for a moment worry on my account Mother looks after me She is bringing

me fast out of the hell of emotionalism and bringing me into the light of pure reason With everlasting wishes for your happiness

Ever your brother
VIVEKANANDA

PS Margot starts on the 26th I may follow in a week or two Nobody has any power over me for I am the spirit I have no ambition it is all Mother s work I have no part V

I could not digest your letter as the dyspepsia was rather bad last few days V

Non attachment has always been there It has come in a minute Very soon I stand where no sentiment no feeling can touch me V

## CLXXXIII

*To Miss Mary Hale*

102 E 58TH STREET
NEW YORK
*11th July 1900*

MY DEAR DEVOTED SISTER

I was glad to get your note as also to learn that you were going to Greenacre Hope you will have much profit I have been much censured by everyone for cutting off my long hair I am sorry You forced me to do it

I had been to Detroit and came back yester day Trying as soon as possible to go to France thence to India Very little news here the worl is closed I am taking regularly my meals and sleeping—that is all

Ever faithful and loving brother
VIVEKANANDA

PS Write to the girls to send my mails if any at Chicago V

## CLXXXIV

*To Swami Turiyananda*

102 EAST 58TH STREET
NEW YORK
*18th July 1900*

MY DEAR TURIYANANDA

Your letter reached me redirected I stayed in Detroit for three days only It is frightfully hot here in New York There was no Indian mail for you last week I have not heard from Sister Nivedita yet

Things are going on the same way with us Nothing particular Miss Muller cannot come in August I will not wait for her I take the next train Wait till it comes With love to Miss Boocke

Yours in the Lord
VIVEKANANDA

PS Kali went away about a week ago to the mountains He cannot come back till September I am all alone and washing I like it Have you seen my friends? Give them my love

V

## CLXXXV

*To Miss Josephine MacLeod*

102 EAST 58TH STREET
NEW YORK
*20th July 1900*

DEAR JOE

Possibly before this reaches you I shall be in Europe London or Paris as the chance of steamer comes

I have straightened out my business here The works are at Mr Whitmarsh s suggestion in the hands of Miss Waldo

I have to get the passage and sail Mother knows e rest

My *intimate* friend did not materialise yet and writes e will come some time in August and she is dying to e a Hindu and her soul is burning for Mother India

I wrote her I may see her in London Mother ows again Mrs Huntington sends love to Margot d expects to hear from her if she is not too busy with r scientific exhibits

With all love to sacred cow of India to yourself the Leggetts to Miss (what s her name?) the American ɔber plant

Ever yours in the Lord
VIVEKANANDA

## CLXXXVI

*To Miss Josephine MacLeod*

102 EAST 58TH STREET
NEW YORK
*24th July 1900*

AR JOE

The sun=Knowledge The stormy water=Work e lotus=Love The serpent=Yoga The swan= : Self The Motto—May the Swan (the Supreme Self) id us that It is the mind lake [1] How do you like it? ıy the Swan fill you with all these anyway

I am to start on Thursday next by the French amer *La Champagne* The books are in the hands of ıldo and Whitmarsh They are nearly ready

I am well getting better—and all right till I see you :t week

Ever yours in the Lord
VIVEKANANDA

[1] This explains the design on the Ramakrishna Math and sion seal printed on the title page of this volume —ed

## CLXXXVII

*To Swami Turiyananda*

102 EAST 58TH STREET
NEW YORK
*25th July 1900*

DEAR TURIYANANDA

I received a letter from Mrs Hansborough telling me of your visit to her They like you immensely and I am sure you have found in them genuine pure and absolutely unselfish friends

I am starting for Paris tomorrow Things all turn that way Kali is not here He is rather worried at my going away but it has got to be

Address your next letter to me care of Mr Leggett 6 Place des Etats Unis Paris France

Give my love to Mrs Wyckoff Hansborough and to Helen Revive the clubs a bit and ask Mrs Hansborough to collect the dues as they fall and send them to India Sarada writes they are having rather hot times My kind regards for Miss Boocke With all love

Ever yours in the Lord
VIVEKANANDA

## CLXXXVIII*

*To a Brahmachari at the Advaita Ashrama Mayavati*

NEW YORK
*August 1900*

DEAR——

I had a letter from you several days ago but I could not reply earlier Mr Sevier speaks well of you in his letter I am very pleased at this

Write to me in minute detail who all are there and what each one is doing Why don t you write letters to your mother? What is this? Devotion to the mother is the root of all welfare How is your brother getting on with his studies at Calcutta? The Sannyasin names of those there escape my memory—how to address each? Give my love to all conjointly I got the news that Khagen has now fully recovered This is happy news Write to me whether the Seviers are attending to your comforts and other details I am glad to know that Dinu s health is all right The boy Kali has a tendency to become fat but this will all surely go away by constantly climbing up and down the hills there Tell Swarup that I am very much pleased with his conducting of the paper He is doing splendid work Give to all others also my love and blessings Tell everybody that my health is now all right From here I shall go to England and from there to India very shortly

With all blessings
VIVEKANANDA

## CLXXXIX*

*To Swami Turiyananda*

6 PLACE DES ETATS UNIS
PARIS
*13th August 1900*

DEAR BROTHER HARI

I got your letter from California So three persons are getting spiritual trances well it is not bad Even out of that much good will come Shri Ramakrishna knows! Let things happen as they will His work He knows you and I are but servants and nothing else

I am sending this letter to San Francisco—care of Mrs C Panel Just now I got some news from New York They are well Kali is on tour Write in detail about your health and work in San Francisco And don t be indifferent to the question of sending money to the Math See that money goes certainly every month from Los Angeles and San Francisco

I am on the whole doing well I am shortly starting for England I get news of Sharat Recently he had an attack of dysentery The rest are all well This time few got malaria nor is it so prevalent on the banks of the Ganges This year owing to scarcity of rain there is fear of famine in Bengal also

By the grace of Mother go on doing work brother Mother knows and you know—but I am off! Now I am going to take a rest

Yours affectionately
VIVEKANANDA

## CXC

*To Mr John Fox*

BOULEVARD HANS SWAN
PARIS
*14th August 1900*

JOHN FOX ESQ
6 Dr Wolf Street
Dorchester Mass U S America

Kindly write M—— that he has my blessings in whatever he does And what he is doing now is surely much better than lawyering etc I like boldness and adventure and my race stands in need of that spirit

much Only as my health is failing and I do not expect to live long M—— must see his way to take care of mother and family I may pass away any moment I am quite proud of him now

Yours affectionately
VIVEKANANDA

## CXCI*

*To Swami Turiyananda*

6 PLACE DES ETATS UNIS
PARIS

DEAR BROTHER HARI

Now I am staying on the seacoast of France The session of the Congress of History of Religions is over It was not a big affair some twenty scholars chattered a lot on the origin of the Shalagrama and the origin of Jehovah and similar topics I also said something on the occasion

*My body and mind are broken down I need rest* badly In addition there is not a single person on whom I can depend on the other hand so long as I live all will *become very selfish depending upon me for every* thing

Dealing with people entails constant mental uneasiness I have cut myself off by a will *Now I* am writing to say that nobody will have sole power All will be done in accordance with the view of the majority

If a trust deed on similar lines can be executed then I am free

What you are doing is also Guru Maharaj s work Continue to do it Now I have done my part *Don t*

write to me any more about those things do not even mention the subject I have no opinions whatever to give on that subject

Yours affectionately
VIVEKANANDA

PS Convey my love to all

CXCII*

*To Swami Turiyananda*

6 PLACE DES ETATS UNIS
DA FOREST P O SANTA CLARA CO
PARIS FRANCE
*1st September 1900*

MY DEAR HARI

I learnt everything from your letter Earlier I had an inkling of some trouble between the full fledged Vedantist and the Home of Truth—someone wrote that Such things do occur wisdom consists in carrying on the work by cleverly keeping all in good humour

For some time now I have been living *incognito* I shall stay with the French to pick up their language I am somewhat freed from worries that is to say I have signed the trust deed and other things and sent them to Calcutta I have not reserved any right or ownership for myself You now possess everything and will manage all work by the Master s grace

I have no longer any desire to kill myself by touring For the present I feel like settling down somewhere and spending my time among books I have somewhat mastered the French language but if I stay among the French for a month or two I shall be able to carry on

There is no knowing where my next stop will be This much I can say that I am trying to be free from care

I received a letter from Kali too today I shall send him a reply tomorrow The body is somehow rolling on Work makes it ill and rest keeps it well—that is all Mother knows Nivedita has gone to England She and Mrs Bull are collecting funds She has a mind to run a school at Kishengarh with the girls she had there Let her do what she can I do not intervene any more in any matter—that is all

My love to you But I have nothing more to advise as regards work

Yours in service
VIVEKANANDA

## CXCIV

*(Translated from the original in French)*

6 PLACE DES ETATS UNIS PARIS
*October 1900*

My Dear Mademoiselle

I have been very happy and content here I am having the best of times after many years I find life here with Mr Bois very satisfactory—the books the calm and the absence of everything that usually troubles me

But I don t know what kind of destiny is waiting for me now

My letter is funny isn t it? But it is my first attempt

Yours faithfully
VIVEKANANDA

## CXCV

*To Sister Christine*
*(Translated from the original in French)*

6 PLACE DES ETATS UNIS
PARIS
*14th October 1900*

God bless you at each step my dear Christine such is my constant prayer!

Your letter so beautiful and so calm has given me that fresh energy which I am often losing

I am happy yes I am happy but the cloud has not left me entirely It sometimes comes back unfortunately but it no longer has the morbidity it used to have

I am staying with a famous French writer M Jules Bois I am his guest As he is a man making his living with his pen he is not rich but we have many great ideas in common and feel happy together

He discovered me a few years ago and has already translated some of my pamphlets into French We shall in the end find what we are looking for isn t it?

Thus I shall travel with Madame Calve Miss MacLeod and M Jules Bois I shall be the guest of Madame Calve the famous singer

We shall go to Constantinople the Near East Greece and Egypt On our way back we shall visit Venice

It may be that I shall give a few lectures in Paris after my return but they will be in English with an interpreter

I have no time any more nor the power to study a new language at my age I am an old man isn t it?

Mrs Funke is ill I think she works too hard She already had some nervous trouble I hope she will soon be well

I am sending all the money I earned in America to India Now I am free the begging monk as before I have also resigned from the Presidentship of the Monastery Thank God I am free! It is no more for me to carry such a responsibility I am so nervous and so weak

As the birds which have slept in the branches of a tree wake up singing when the dawn comes and soar up into the deep blue sky so is the end of my life

I have had many difficulties and also some very great successes But all my difficulties and suffering count for nothing as I have succeeded I have attained my aim I have found the pearl for which I dived into the ocean of life I have been rewarded I am pleased

Thus it seems to me that a new chapter of my life is opening It seems to me that Mother will now lead me slowly and softly No more effort on roads full of obstacles now it is the bed prepared with birds down Do you understand that? Believe me I feel quite sure

The experience of all my life up to now has taught me thank God that I always find what I am looking for with eagerness Sometimes it is after much suffering but it does not matter! All is forgotten in the softness of the reward You are also going through troubles my friend but you shall have your reward Alas! What you now find is not a reward but an additional affliction

As to myself I see the cloud lifting vanishing the cloud of my bad Karma And the sun of my good Karma rises—shining beautiful and powerful This will also be the case for you my friend My knowledge of this language has not the power to express my emotion But which language can really do so?

So I drop it leaving it to your heart to clothe my

thought with a soft loving and shining language Good night *gute Nacht*!

Your devoted friend
VIVEKANANDA

PS We shall leave Paris for Vienna on October 29th Mr Leggett is leaving for the United States by next week We shall notify the Post Office to forward our letters to our further destinations V

## CXCVI

*To Miss Josephine MacLeod*

PORT TEWFICK
*26th November 1900*

DEAR JOE

The steamer was late so I am waiting Thank goodness it entered the Canal this morning at Port Said That means it will arrive some time in the evening if everything goes right

Of course it is like solitary imprisonment these two days and I am holding my soul in patience

But they say the change is thrice dear Mr Gaze s agent gave me all wrong directions In the first place there was nobody here to tell me a thing not to speak of receiving me Secondly I was not told that I had to change my Gaze s ticket for a steamer one at the agent s office and that was at Suez not here

It was good one way therefore that the steamer was late so I went to see the agent of the steamer and he told me to exchange Gaze s pass for a regular ticket

I hope to board the steamer some time tonight I am well and happy and am enjoying the fun immensely

How is Mademoiselle? Where is Bois? (
everlasting gratitude and good wishes to Mme Ca
is a good lady

Hoping you will enjoy your trip

Ever affectionatel;
VIVEK

CXCVII

*To Mrs Ole Bull*

THE MATH BELU
HOWRAH DIST BENGAL
*15th December 1*

MY DEAR MOTHER

Three days ago I reached here It was qu
expected—my visit and everybody was so surpri

Things here have gone better than I expected
my absence only Mr Sevier has passed away It
tremendous blow sure and I don t know the future
work in the Himalayas I am expecting daily a
from Mrs Sevier who is there still

How are you? Where are you? My affair
will be straightened out shortly I hope and I am
my best to straighten them out

The remittance you send my cousin should I
forth be sent to me direct the bills being drawn
name I will cash them and send her the money
better the money goes to her through me

Saradananda and Brahmananda are much
and this year there is very little malaria here
narrow strip on the banks of the river is always free
malaria Only when we get a large supply of
water the conditions will be perfected here

VIVEKAN

a, sugar being excreted the specific gravity of urine is raised This diuresis of even 4 to 10 liters or mor ugar and sodium chloride depletion and dehydration with ain of events like cramps weakness *thirst etc* As the the body is excreted out without utilization the patient ces an insatiable **appetite** and greater weakness partly loss of sodium ions in excess both being increased with intake of carbohydrate as the patient is ravenously hungry greater depletion leading to progressively greater weakness nger The patient to satisfy his hunger takes sometime us amount of carbohydrate (**polyphagia**) to make the circle complete and worse Such sugared blood being a lture medium for bacteria specially for the easy grower ococcus trivial infections of the skin or cuts or bruises lo not affect a normal individual may lead to serious carbuncle or cellulitis generalised sepsis sometime with esults Irritation of sugar may lead to *frequency of* ion and pruritus which may be distressing

e damage to the delicate **nerve** tissues in probably ed by the changes of an occluding nature occurring in vorum *Because it has been noted that young diabetics* ter long illness seldom show neurological complications in the elderly mostly due to vascular changes th manifestations sometimes appear early Arterio sclerosis is d partly by the increased cholesterol content and lipaemia l which help in the production of diabetic gangren sed vascular changes common in diabetics notably in persons suffering for a good number of years should dered a common pathological change inseparable from c metabolic disorder

**rdered Metabolism** —The older idea that the hot flame hydrates oxidizes the ketone bodies appear no long and the pre ent opinion is that the ketone bodie oxybutyric acid acetoacetic acid and acetone) ar burnt for production of energy independent of the of carbohydrates But in the severe diabetic there is mobilisation and oxidation of fat consequent upon the aastion of carbohydrates and the rate at which the e

as seen in diabetic coma These acids in blood are neutralised by ammonia and the **ammonia coefficient** of urine rises from normal of 5 per cent to, much higher figures sometimes of 15 to 18 per cent even The proteins being now utilised for formation of sugar the **dextrose nitrogen** ratio is altered and the **respiratory quotient** falls below unity and the **alveolar** $CO_2$ **tension** also correspondingly decreases also partly due to reduction of reserve alkali of blood

**Clinical manifestations**—In mild diabetes symptoms may be *completely absent for years* although sugar may be present in the urine continuously In more **severe cases polyuria or polydipsia or polyphagia or undue loss of weight or weakness or one of the complications singly or in combination may be the presenting complaints** But in all cases in order to ascertain the true nature degree etc of the disease sugar tolerance tests and the estimation of the fasting blood sugar level appears indispensable Simultaneous estimation of urine sugar may be of value

**On examination the patient** may appear variably nourished Cases of juvenile diabetes may be reduced to only skin and bone The **tongue** may be red and dry specially in severe cases with a tendency to coma. The cardio vascular system may show variable *degenerative changes specially in the elderly diabetics*

**Urine**—The specific gravity is generally over 1020 and the reaction is acid A copper reducing substance is present as is shown by Fehling s or Benedict s test Fermentation and other tests demonstrate that this copper reducing substance is glucose The presence of ketone bodies is partly revealed by Gerhardt s *ferric chloride* test and the more delicate sodium nitroprusside test of Rothera The fasting blood sugar level is high The alkali reserve of blood is diminished and other biochemical and metabolic derangements have already been described may or may not be present

**Course**—The course depends on the type of the disease present which may be mild or severe In children or in young people (juvenile diabetes) it is usually severe and prolonged but in elderly individuals who are overweight the disease is usually milder The course can be favourably influenced notably in the elderly by early adequate treatment specially by bringing down the weight to optimum or below

**Complications**

**Coma**—Premonitory signs and symptoms at onset of coma may be headache lassitude epigastric pain vomiting diarrhoea mental unrest or torpidity or incoherent speech etc which should warn the medical man against the impending onset of coma

Precipitating causes of coma may be, (1) *acute infection* febrile like influenza malaria or sepsis like carbuncle cellulitis appendicitis cholecystitis or deep seated apparent or hidden abscesses or other infections (2) Omission of the usual dose of insulin (3) Taking of large amounts of carbohydrates (4) Hyperthyroidism (5) Shock fright prolonged nervous strain etc (6) Operations or other surgical interference etc (7) Hard physical exertion causing perspiration and dehydration

Coma may be usually of **three types** (1) The typical Kussmaul s air hunger type or dyspoenic variety with deep noisy inspiratory efforts is quite characteristic The inspiration is *full and voluminous in contrast with the short hissing respiratory* excursions of **uraemia** The pulse is soft small and quick The temperature may be subnormal The breath imparting a fruity odour due to acetonaemia Sometime the patient may not be fully unconscious till death

The other two less common forms are (2) alcoholic intoxication type without much air hunger (3) The collapsing type manifesting collapse without much respiratory difficulty The last two types can only be diagnosed by careful examination of the urine history where available blood sugar estimation and where possible by determination of alveolar CO 2 tension ammonia coefficient of urine etc

**Infections**—Local infections like boils, carbuncles gangren etc the last mentioned one commoner in the elderly specially of the inferior extremity is due partly to poor blood supply as a result of arteriosclerosis and easy sepsis Generalized sepsis is easy for reasons already given

**Pruritus** may be troublesome sometimes distressing and persistent and is probably due to excess of sugar in the blood causing irritation

**Heart and blood vessels.**—Myocardial degeneration in elderly diabetics of some standing may partly be due to coronary sclerosis thus *favouring easy thrombosis much more frequently* than in normal controls of the same age

**Hypertension** in elderly diabetics may be the cause or effect of this disease

**Pulmonary tuberculosis** terminates many cases Broncho pneumonia and pneumonia are serious complications and coma may be precipitated along with their onset

**Renal**—Trace of albumin in the urine is common Starvation or retention of too much of sodium ions may cause oedema

**Digestive**—Bad pyorrhoea alveolaris is a common exciting and precipitating factor of diabetes and its complications Nausea vomiting, *pain in the abdomen may herald in, a hitherto absent*

coma Obstinate constipation is harmful and always makes the condition worse but is common and partly due to dehydration and loss of fuel

**Nervous**—Peripheral neuritis perforating ulcers etc mean advanced disease and commoner in elderly diabetics with arterio sclerosis where the vasa nervorum are so commonly affected Rarely the posterior columns of the spinal cord may be damaged suggesting *tabes-dorsalis*

**Special senses**—Premature cataract retinitis optic atrophy are not uncommon causes of defective or loss of vision Lipaemic arteries of retina and the fundus oculi and the retina in general should always be examined by an ophthalmoscope in a diabetic notably when elderly and the disease of some standing Very valuable information may thus be got

**Genital system**—Though not disturbed at the beginning males may become impotent in late stages females unless treated and properly managed may get worse after child birth Uterine inertia and coma due to starvation and ketosis and blood loss may follow parturition

**Diagnosis**—The reducing substance in urine may not be glucose Fehling s solution is reduced by uric acid creatinin glycuronic acid lactose pentose and homogentisic acid But Benedict s solution is much dependable and when this reagent is reduced it is likely to be glucose but fermentation and other test should have *to be carried out in order to be sure Glycosuria* does not necessarily mean diabetes mellitus A blood sugar by tolerance test generally and a fasting blood sugar estimation would help much

**Differential diagnosis**—**Bronzed diabetes** in haemachroma tosis is a rare condition and is diagnosed by pigmentation enlarged liver and so on Acute pancreatitis causing glycosuria is easy to diagnose In all cases of diabetic glylcosuria renal diabetes need be excluded Sugar tolerance test and estimation of fasting blood sugar are very important diagnostic features in establishing the diagnosis of true diabetes mellitus

**Test for ketone bodies** should always be made in all specimens of urine in diabetics All other causes of increased quantity of urine as in contracted kidney diabetes insipidus etc, have got to be distinguished from diabetes mellitus In the **chronic** kidney condition there is large quantity of limpid urine of low specific gravity of about 1010 with traces of albumin granular casts may be *with hypertorphy of the heart having booming fir*st sound at the downwardly displaced apex accentuated aortic second sound may be retinal changes and raised non protein nitrogen content of the blood **In diabetes insipidus,** the quantity of urine is very profuse the specific gravity near about 100[illegible] but no albumin casts | etc. are there and it responds well t

injections of liquid extract or intranasal insufflation of powd Pituitrin oral administration of valerian etc and restrictio salt and water

**Prognosis,** depends on the clinical type Th the cases have been classified in various clinical groups suc ***mild, moderate or severe*** *yet they are all empirical and hav* scientific basis as the mild cases may if left untreated or unc for drift into the severe group According to NAUNYN the glucose disappears with the patient on a non carbohyd diet the case belongs to the former type (mild) If on the o hand he continues to excrete glucose the case is a severe for it means that sugar is being produced from body prot The presence of a high ammonia secretion low respiratory c tient low $CO_2$ combining power of blood and Beta oxybut acid and its derivatives acetone and diacetic acid is also dication of a severe type

Prognosis is good in all mild types of disease Even severe cases it is favourable provided the patient can be tre early and adequately and will carry out directions of treatm with a determination to get cured

Once a stabilised and maintenance diet is ascertained prognosis subsequently depends mainly on the patient Perh *in no other disease does the patient derive so much good* strictly following the instructions of the Doctor and the diet regime as in diabetes mellitus Any sepsis tend to produce co Supervention of pulmonary tuberculosis is a serious combinat and may be terminal and requires large doses of insulin and str tomycin combined with para amino salicylic acid and suita diet Death may follow from complications like coma card vascular changes sepsis *intercurrent diseases like tuberculo* hypertension and others

## TREATMENT

**Preventive**—*As diabete is common in overweight sedent* people and as families with a history of diabe generally show a tendency to over grow in weight hen every effort should be made to keep their weight ju a little below the optimum by curtailment of fats a carbohydrates specially and he should take regu outdoor physical exercise The average weight of a diabetic i *dividual of 5 feet should be roughly 100 pounds* and for ea additional inch 3 to 4 pounds may be granted This is t minimum weight and 10 to 20 per cent increase in weight ma be allowed for normal persons specially those who take regul physical exercise Corpulent persons of past middle age shou take regular physical exercise and take careful diet to try t bring their weight down to the optimum level Starvation on very low diet once a week may be of use

**Hygienic measures** like removal of all septic foci either in the teeth tonsils intestine or in any other place need eradiction where possible Bowels should be kept open and regular Worries anxieties are bad and should always be avoided Normal physiological mode of life is a good preventive

**Principles of curative treatment** —(1) To try to manage the carbohydrate metabolism within the limits of activity of the insular element left in the patient This is comparable to the management of cases of cardiac failure by asking them to live within the limits of the power of the myocardium Where this is not practicable the aid of insulin is required (2) In this group their own insulin is not sufficient to make them live on a maintenance diet hence they require extraneous insulin (3) To get rid of complications use of insulin in combination with recent antibiotics is the best treatment notably in septic complications

**Actual plan of treatment** —A preliminary estimation of blood sugar and sugar tolerance test help to ascertain the nature and severity of the disease In overweight elderly diabetics a dietetic plan suitable to reduce their weight with reduction of carbohydrates and fats from diet are all that is required Such patients can be given a diet like the following **Breakfast**—A cup of milk and an orange or tomatoes or an apple tea without sugar saccharin to sweeten **Lunch**—Soup of leafy vegetables such as palon (palok) or pea or gram or leaves of gourd etc about quarter of a seer or eight ounces Fish two ounces or one chittack or an egg or meat of the same weight in any form For vegetarians channa or milk casin two ounces or some preparations of lentil or dal two ounces Twice boiled green vegetables eight ounces consisting of ladiesfingers or palval (patal) or jhinga karala etc Butter and ghee may be used for cooking and frying Afternoon tea should be like the menu of breakfast and dinner similar to that of lunch

Plenty of water and soups or better decoction of leafy green vegetables plain or soured with lime juice appear useful and *sometime helps in the reduction of blood sugar Most of the* vegetable diet mentioned above contain generally 5 per cent or less of carbohydrates The commoner vegetables alllowable besides the above already mentioned are cauliflower radish brinjal mocha (flower of banana) cabbage cucumber onions tomatoes etc *In order to make it filling the diet should be bulky* and the main portion should be made up of the above vegetables in various forms and proportions But the meals **should be evenly distributed so** that the carbohydrates in them may be utilised properly The diet should be made attractive and palatable which depends partly on the cook and other factors

When kept for a few days to a week on the above mentioned diet most of our overweight patients either show much less sugar in the urine or become suagr free If not completely sugar free

injections of liquid extract or intranasal insufflation of powd Pituitrin oral administration of valerian etc and restriction salt and water

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years 130 grams and at 15 year 180 grams of carbohydrate such a larger portion of carbohydrate minimizes the risk of ketosis notably in children and young people

***Proportion of carbohydrate, protein and fat*** —Modern tendency is to give proportionately a more liberal carbohydrate diet The ratio between fat to carbohydrate should be 1 to 1 3 The idea held formerly that bigger amounts of fats may be given has been found to be a dangerous source of ketosis hence there should have a definite ratio The proportion of proteins may be calculated as *half to one gram per pound of body weight per day*

**Insulin treatment** —For rough and ready calculation of the insulin requirement of an individual the 24 hours total collection of urine should be measured and the percentage of sugar in it ascertained Suppose a man is passing 2 000 c cs of urine daily containing 3 per cent. of sugar thus he is excreting 20×3=60 grams of sugar unutilised in the urine To burn this 60 grams about 30 units of insulin **calculated at the rate of 2 grams per unit of insulin,** may prove adequate and generally is given in two subcutaneous injections of about fifteen units each about quarter of an hour pervious to each of the two principal meals lunch and dinner Generally if carried on for a few days this dosadge is likely to make the patient s urine sugar free and also the blood sugar level may fall within normal limits Sometimes specially in the presence of sepsis or other complications very large doses of insulin are required and the calculation does not conform to the above **standard of calculation** but for all practical purposes it may be said that one unit of insulin helps in the utilization of about 1 5 to 2 grams of sugar

**Other indications of insulin therapy** —1 As already emphasized insulin is indicated in those cases who cannot metabolize enough carbohydrates on the restricted diet indicated already For them to derive just enough energy to carry on their duties would require insulin to supplement their own These are generally moderately severe or severe cases of diabetes mellitus 2 In complications of diabetes such as coma gangrene septic processes tuberculosis of the lung and such others 3 Where surgical intervention is required on a diabetic 4 In mild cases normally manageable on a restricted diet the supervention of any intercurrent disease may show glycosuria here insulin at least for the time being is essential 5 For thin diabetics to gain optimum weight 6 Sometime to increase weight in anorexia nervosa tuberculosis in thin persons profound loss of appetite and others

It is better that insulin treatment should be controlled not only by estimation of the urine sugar but also by co-relating these findings with the estimation of blood sugar

***Other types of insulin*** —*We have got now three types of* insulin 1 The ordinary soluble insulin when injected the

on a sample diet like the above the lentils or dal may have to be curtailed and partial starvation enforced The milk sugar may be made to get fermented and given in the form of dahi or soured curdled milk or buttermilk (ghole) If kept on a diet like the above for a few weeks most of the cases are likely to be sugar free except thin juvenile diabetics always requiring insulin Once the patient is sugar free and has lost some weight to reach his optimum or in cases of thin diabetics gradual addition by cautious increase of milk fruits which are not sweet and meat, fish eggs milk casein may be increased by gradual quantities The ultimate object being to give the basal requirement of an individual which is generally about 2100 calories for a person of ten stones weight *As the patient s general condition improves* small amounts of carbohydrates in the form of flour or loaf beginning from two ounces gradually increased may be allowed and *that short of glycosuria* Sugars and *carbohydrates should* be very carefully added

**In calculating the number of calories required,** it is better first to ascertain what should be the correct or optimum body weight of that individual and diet given on the basis of fifteen callories for each pound of ideal or optimum body weight and with the addition of ten to twenty per cent more according to the muscular work or occupation to be undertaken by the patient later on when doing his usual work Thus a man of ten stones requires about 2100 calories as a basal diet **A basal diet** is one which provides an adequate number of calories for a person at colplete rest A **maintenance diet** is one containing sufficient calories for an ordinary active life There is a group of workers on diabetes mellitus who advocate a higher caloric diet and suggest that maintenance diet should contain about thirty per cent more calories than a basal diet For practical purposes an **adult male** patient will find it adequate to have 35 to 40 calories per kilo or seer or per two pounds of body weight Thus as an example it may be suggested that persons doing ordinary sedentary work weighing ten stones require 2 500 calories weighing eleven stones 2 800 calories and twelve stone 3 100 calories For **female patients** about ten per cent of the calories mentioned may be deducted For children who are likely to develop ketosis more quickly particularly when there is an infection relatively large amounts of carbohydrates need be allowed Roughly the following calculations will help ***Under six years*** three to four grams of **protein** per kilo of body weigh **from seven to twelve years** two to three grams per kilo and between **twelve to adult life** one to two grams The total calories should be higher than in adults and at infancy from 100 calories per kilo to about 50 calories at the age of twelve need be given A child of five years should receive about 100 grams at ten

uickly intervenously may embarrass or even kill the patient by edema of the lungs etc *The blood pressure and the tension the eyeballs may form a guide as to the adequacy or not of e quantity of saline given* Potassium ions may be very useful the presence of air hunger *Alkalies should be given plenti lly* Sometime a Ryles tube introduced intranasally for eva iating the stomach and kept fixed on the cheek by adhesive aster may be utilised for hydration and giving glucose saline kalies and subsequently for diet etc Shock constipation and art weakness should be treated according to indication

**Stomach and intestinal lavage,** appears essential in all cases coma This should be undertaken after the more urgent items the treatment of coma have been met with

**Vitamins** —The patient s diet should contain all the vitamins ecially A B and C C vitamin appears of use to improve the eneral condition

**Hypoglycaemia** —There may be the danger of a patient of abetic coma while under insulin treatment to pass into the age of hypoglycaemic shock and consequent unconsciousness heir differential diagnosis is detailed below

| | Dibetic Coma | Hypoglycaemic Coma |
|---|---|---|
| *Onset* | *Gradual* | *Very sudden* |
| Skin | Usally flushed or Cyanotic Dry | Usally very white, but may be normal *sweating common* |
| Tongue | Dry | Moist |
| Breath | Smells of acetone | No smell of acetone |
| Respiration | *Deep specially the* adominal movement | *Shallow* |
| Pulse | Rapid feeble | Normal and bounding |
| Eyeball tension | *Low* | *Normal or raised* |
| Urine | Contains Sugar and diacetic acid | Does not contain sugar or diacetic acid unless) the bladder has not been emptied for some hours) |
| Blood Sugar | Over 200 mg percent sometime much higher | Below 70 mg percent may be as low as 40 mg |
| Blood pressure | Low | Normal |

Hypoglycaemic shock should be treated by injection of half a c c f adrenalin intramuscularly and adequate amount of glucose per ein

action starts almost in an hour reaching maximum in three hours about and lasts for about five or more hours This is the original **soluble insulin** discovered by Banting and Best Strangely the action of this insulin almost coincides with the absorption of carbohydrate from the intestine and its rather longer stay in the blood in a diabetic 2 **Globin insulin with zinc** which starts effect from the sixth hour after injection and the action lasts for twelve hours more to some extent fo fifteen hours after taking effect it is the **intermediately** acting one 3 The **zinc protaminate of insulin** which usually starts to lower blood sugar about twelve hours after the injection and the effect lasts for about another twelve to fifteen hours hence the risk of hypoglycaemic shock or coma in some patients in the early hours of the next morning In order to avoid two injections one before each meal of soluble insulin one can safely giv **equal amounts of soluble and globin insulin mixed together in the same syringe fifteen minutes before lunch and this one injection will be enough for lunch and dinner both, as the globin insulin starts acting late**

**Treatment of diabetic coma**—A case of diabetic coma has got to be differentiated from other causes producing coma But the urinary ketones and blood sugar findings along with a history generally help Once the patient has developed coma it should be treated **as a medical emergency**

**Dose**—If the coma is deep one may give 40 to 60 units of **soluble insulin and never any other slowly acting insulin** subcutaneously But in very severe cases the dose of insulin may be calculated at the rate of two units per kilogram of body weight if the usual daily requirement of insulin of the patient is known then it would be wise to give double the amount in units as the initial dose Where facilities for estimation of blood sugar is lacking **three hourly determination of the percentage of urine** sugar and presence or not of **ketone bodies** of catheter specimen appears essential The subsequent doses of insulin should be about one fourth or more of the initial dose every two to fou hourly thus giving some time for the insulin to act

Along with insulin notably after the initial dose given without sugar simultaneous injection of glucose at the rate of at least two grams per unit of insulin should have to be given in all subsequent injections of insulin to give fuel (glucose) and fire (insulin) in order **to create a hot flame for complete combustion of ketone bodies and fat in the system**

**Fluids**—Generally there is **great dehydration** requiring treatment by saline and sometimes soda bicarb along with i Salt depletion with or without cramps is generally considerable hence requires sometime two to six pints of saline This amount should be given cautiously because to push in all this quantity

**Pathology** —There are two sources of uric acid in the body (1) the exogenous from diet and endogenous from wear and tear of nucleoprotein etc derived from the daily tissue breakdown There may be three probabilities in the rise of uric acid from the normal level of one to three mg to three to nine mg per 100 c c. of blood in gouty subjects (1) Retention and improper excretion of uric acid (2) Improper purin metabolism (3) Damage to the liver

Normally nucleoproteins are metabolised with formation of nucleic acid a substance containing purin ring This is converted into adenine and guanine by oxidation again into hypoxanthin and xanthin finally into uric acid It is not unlikely that all the uric acid formed is not excreted out but some is katabolised in the blood But it should be clear that raised uric acid content of blood is found in leukemia and some forms of nephritis hence all conditions with increase of uric acid content of blood need not necessarily be interpreted as gout

*At autopsy the most important change is the deposit of uric acid* as sodium biurate in the joints showing whitish smears of urate on cartilage but microscopic study shows that this deposition is under a thin layer of cartilage The palms of the hands may show white lines the joints are deformed **Tophi**, sodium biurate looking like small balls of chalk may be found in the cartilage of the ear specially in the outer margin of the pinna Deposit of urates may be found on the pyramids of kidneys. Well marked fibrotic changes may be encountered in the kidney and the blood vessels and these may be the ultimate cause of death of the patient Sometimes myocardial degeneration pericarditis atheroma arterio-sclerosis, hypertension or the failure of the heart or cerebral haemorrhage or uraemia may close the scene

**Clinical manifestations** —**Acute attacks** —A middle aged person or an elderly individual who complains of dyspepsia or other digestive troubles and irritability of temper pain in the hands, acidity flatulence and constipation for a few days wakes up one midnight with severe pain of a burning and/or throbbing or boring character together with great tension and stiffness of **the metatarso phalangeal joint of the big toe.** Shivering and light pyrexia usually of 101 to 102°F is common generally associated with considerable restlessness After a few hours of agony the patient begins to perspire and then falls off to sleep and rises up in the morning to find the joint swollen red hot shiny and tense The joint **on examination** looks swollen red shiny extremely tender the neighbouring lymphatics enlarged and the veins engorged Such acute painful attacks usually recur for three or four successive nights and then passes off

The skin overlying the affected joint may desquamate with reduced sensitivity Occasionally the attacks may come during

**Complications like infections** sepsis pulmonary tuberculosis etc require always the help of insulin Insulin should be given in proper doses and also enough to make the tuberculous patient gain in weight Penicillin streptomycin and sulphonamides should never be spared but utilised fully according to indication and others

**Pregnancy and diabetes** are very bad combinations and may require careful supervision of a physician and an obstetrician together notably during and after childbirth Insulin and proper treatment in the lines of coma may have to be promptly instituted with the remotest possibility of coma supervening after parturition

## GOUT

**Synonym** —Podagra

**Definition** —A disease of disturbed purin metabolism derived mainly from nucleoproteins with increase of uric acid in blood characterised by attacks of acute arthritis mostly of the ball of the great toe with deposit of sodium biurate crystals Later some of the other joints may be similarly affected **Etiology Geographically** it is much commoner in England and Germany But Scotland and America are probably not so much affected apparently due to the type of alcohol drunk by the majority Rather uncommon in the tropical people probably partly due to less of proteins and poor diet though climate by itself may exert no influence The incidence of this disorder is gradually becoming lesser and is certainly not common in India nowadays

**Family history** —Gout has a strong hereditary tendency in its incidence and there are well known gouty families with definite diathesis some suffering from gout others from asthma urticaria eczema the last few are all partly allergic conditions Thus how far allergy has a share in its pathogenesis it is yet difficult to say **Age** Commoner between thirtyfive to fifty years

**Males** predominate Very liberal indulgence in food and drink is an important predisposing factor The quantity when large is almost as important as quality of diet of which liver brain kidney sweet bread fish roe and other purin rich food are conducive to cause an attack

**Drink**—Distilled liquors like whisky brandy are not so injurious as fermented liquors like port sherry etc Beer is also conducive

**Occupation** —Commoner amongst lead and malt workers and also in sedantary brain workers **Infection** from any source such as teeth tonsils gall bladder appendix sinuses and tubes in women intestines and other tracts may predispose **Season** cases appear commoner in spring in cold countries **Trauma,** such as tight shoes or blows or worries and anxieties constipation overeating or drinking fermented liquors all appear singly or collectively to be predisposing

**Treatment —Preventive** —Sufferers or those with a famil history of gout should be specially abstemious in habits of food and drink By reasonable physical exercise coupled with dietetic restrictions they should try to keep themselves below averag weight

Articles of diet containing excess of purin such as liver kidneys pancreas brain sweet bread etc are forbidden or if taken at all must be in great moderation The diet should consist mostly of vegetables bread fresh fruit, fish milk products and cheese etc meat may be allowed in moderation From practical experience most gouty subjects know that excess of beer and fermented liquors may precipitate an attack

**Curative** —During an attack the affected part should be covered with cotton wool and pressure of bed clothes avoided by the use of a cradle Warmth locally in various forms may be gratifying Colchicum with soda salicylate and double the dose of an alkali in a prescription like the following given four hourly may be of use and may act at times like a specific Tinct. colchicum m 15 soda salicylate (nat) gr 20 pot bicarbonate gr 30 extract of liquid glycerrhizae m 20 syrup-m 30 pepper mint water to make up to half an ounce As colchicum is an irritant to the gastro-intestinal tract it is better not to continue the above prescription for more than three to four days Bowels should be kept open by saline purgatives Colchicine pills of /100 grain each one every two hourly are very effective in re lieving symptoms in a day Fluids should be taken in plenty

Cinchophen (atophan) or neocinchophen in 7½ grain doses thrice daily for three days is useful but is toxic to the liver and should not be continued for more than six days where available and can be afforded special spa treatment may be of use

## OBESITY

**Definition** —Excessive generalised deposition of body fat

**Etiology** —**Predisposing factors Race** Certain races viz people of South Germany South Italy the Dutch the Maltese the Hebrews Indians particularly Marwaries Ceylonese are pre disposed to be fatty Futcher found hereditary tendency in 60 per cent of cases Probably heredity acts by propagating th habit of overeating and drinking and also through a dull thyroid and other glands of internal secretion running in families The basal metabolism probably due to excess of thyroid activity when raised in the family members the latter are unlikely to be obese even when they indulge in excess of food This probably explains besides other factors why persons of certain families are habitually thin inspite of good diet

the day time and may last the whole day After an attack strangely the patient feels extremely fit Less frequently affected joints are those of the finger thumb, wrist elbow knees and rarely others Polyarthritic attacks are uncommon Acute and fatal gastroenteritis may rarely accompany acute attacks of gout.

**Blood** —During an attack blood shows leukocytosis with increase of neutrophils up to twenty to twentyfive thousand per c mm

**Blood uric acid** —Just before and during the early part of the attack the uric acid content of blood rises even up to 9 or J mgm per 100 c c of blood to fall after the attack with a greater output in the urine notably at the later stage of the disease and at early convalescence

**Chronic gout** —After several acute attacks the joint may not recover completely and deposits of sodium biurate occur in the ligaments and in the the capsule as well as in the articular cartilages and bones The joints are swollen and irregular in shape In advanced stages chalky material or tophi may peep out from ulcerated areas Dyspepsia high blood pressure and arterio renal disease may be also associated with this condition

**Irregular gout** —The patient may not show any definite acute manifestations of typical gout but may suffer from cutaneous rashes, gastro-intestinal disorder eczema cardiovascular symptom headache neuralgia migraine etc The urine may show plenty of uric acid crystals glycosuria albuminuria may occasionally be noted Iritis retinitis glaucoma may be common In the elderly bronchitis or other intercurrent diseases may close the picture

**Course and complications** —In a lucky few a second attack may never occur but when comes it is usually in a year s time Subsequent recurrences are usually more frequent

**Complications,** like suppuration and abscess round tophi and cardiovascular degeneration incompetence of the kidneys, and eye symptoms already described may be very distressing

**Diagnosis** —In classical gout which is rather uncommon in this part of the world a typical attack involving the great toe gouty familial diathesis in a person generally above the age of forty years who has freely indulged in food and drink are highly suggestive

**Pain in the affected joint while at rest is much in favour of gout** —Presence of tophi in the ear and the high uric acid content of the blood and other clinical signs and other syndromes will help X ray examination may throw considerable light Recovery of function in gouty joints is much more rapid than it is in cases of infective arthritis

**Differential diagnosis** —For the details of differential diagnosis see the corresponding paragraph on rheumatic fever

when they become obese the basal metabolism appears to rise higher

**Circulatory System**—The disabilities in this system are numerous, grave and far reaching Beal has calculated tha every pound of extra fat over the optimum weight of an Indiv dual requires five sixth of a mile of blood vessels to supply it and that a man who is thirty pounds overweight is carrying around him twentyfive miles of excessive blood vessels with a resultant strain on the heart and the circulation **Fat is a parasite and that as we lengthen the waistline we shorten the life line**, a striking fact worth bearing in mind A fatty heart with a tendency towards hypertension with all its associated ill effects sometimes terminate in apoplexy kidney disease and other troubles also appear commoner in them

Respiratory system—Proger and Denning showed that the vital capacity of the obese was twelve to twentyfive per cent lower than that of normals Not only this due partly to failure of proper expansion due to the improper action of the diaphragm etc of the chest thus causing a negative pressure assisting the suction action of venous blood in the chest makes the heart work under disadvantage Combined with the additional circulatory strain already mentioned in the above paragraph this lack of proper venous return leads to formation of varicose veins and a tendency towards piles and stasis in the venous side of the circulation are some of the commoner disadvantages the circulation and the heart have to work under Chronic bronchitis and easy breathlessness on slight exertion appear common partly due to may be in addition a fatty heart loss of vital capacity and strain on the heart and circulation Due to faulty posture notably in very obese visceroptosis may not be uncommon

**Other troubles** and common disabilities may be flat foot postural back ache and greater tendency towards lumbosacral fibromyositis or lumbago and osteoarthritis of the hip or the knee joints commonly and less commonly of the other joints also

**Course and complications**—The condition is often slowly progressive and complications may be any of the disabilities mentioned already

**Diagnosis** is not difficult in the presence of overweight loss of efficiency and with the presence of some of the disabilities mentioned above already Differentiation has got to be made from other known endocrine obesities

**Prognosis**—Obesity tends to lower the expectation of life The life insurance records show that the obese seldom reach the age of 80 years which is usually possible for persons of optimum weight When progressive some or many of the above mentioned disabilities may make him more or less useless They

**Age** —Though common at all ages particularly noted in infancy, adolescence and after forty years of age in men and at menopause in women

**Sex** —Commoner in females than in males

**Etiology** —Roughly speaking the **etiology** may be divided into (1) the **exogenous group** with habits of overeating and overdrinking with lack of physical exercise in the predisposed (2) **Endogenous group** due to deficiency of the endocrines particularly the thyroid (3) **Combination of both these factors** mentioned already in which overeating and dull glands of internal secretion notably the thyroid act together, and are complementary

**Pathology** —In the **exogenous group** the basal metabolic rate is more or less normal where as it is low in the **endogenous** group In the former class anaemia lack of exercise and over eating all combined or partly contribute It has been found out experimentally that if a person consumes 100 calories more than his requirement per day he will put on one pound of weight per week hence proportionally larger diet particularly rich in fat and carbohydrates help in the accumulation of fat with an increase of body weight

In the **endogenous group** besides the reduced activity of the thyroids may be following an acute infection with thyroiditis and subsequent lowered activity there are certain families in whose members there is a tendency to be fatty particularly after certain age probably due to dulling down of the action of the endocrines particularly again the thyroid

All subthyroid conditions have a special tendency to be associated with deposition of fat in the body Besides pituitary sex glands and adrenals may affect the metabolism and help a person to be thin or obese

**Clinical manifestations** —**General** —These overweight individuals are usually of a jolly and calm disposition and may complain of derogate physical appearance verging on ugliness in *cases of too much deposition of fat* *There* is loss of efficiency specially in quick movements and they are incapable of physical feats possible when they were slim But from the point of view of the physician the following appear noteworthy

**Body resistance** —The resistance of the body is much lowered and death rate from acute infections amongst the obese is greater than amongst thin built people with greater longlivity They (the obese) stand surgical operations and septic infections badly also **Gastro-intestinal and metabolic** Besides their generous appetite the fatty persons have a greater tendency to diabetes mellitus and gall stone formation in comparison with normals Their basal metabolism may also be below normal and that is the reason why they easily accumulate fat But later on

Warning—Drastic curtailment of diet specially without a proper balance of the proximate principles and particularly of the vitamins may lead to troubles like duodenal ulcers chronic constipation etc Carelcss and injudicious use of glands of internal secretion have produced disastrous results in a few The key note of treatment should be gradual slow cautious and judicious reduction of weight where hurries and too much of enthusiasm may cause more harm than good

## NUTRITIONAL DEFECT

### HYPOALBUMINAEMIC OEDEMA

**Introduction**—Many of our disabilities and inefficiency may be traced to dietetic and nutritional insufficiency imbalance habits customs indolence mental inertia and others While in advanced countries very big strides have been taken in the extra-ordinary progress in the science of dietetics nutrition and others and many teaching institutions have their own nutritionists imparting knowledge on these matters notably from the physiological biochemical nutritional and other aspects and have succeeded in producing healthier race we in our country have to work hard to achieve the above specially to improve our nation This is why such resistanceless people of ours fall easy victims to all sorts of trivialities to which a more healthy people will not be affected We thus also cannot put forth adequate defence in our fight with diseased processes and our mortality rate is higher too Also it should be understood that in therapy good and adequate diet is a very important weapon of fight besides the expensive medicines which are mostly beyond the reach of most our countrymen—except the few lucky big income group There are numerous border line cases of sub-clinical nutritional defects due to want of proximate principles this hypoalbuminaemic oedema is an obvious one amongst them

**Name etc**—This condition appear to have been variously named in different places and circumstances as hypoproteinaemic oedema, anaemic oedema famine and war oedema even it acquired for itself the epithet of morbus Bengaliensis or the morbidity *or disease of Bengal and such others*

Besides the well established deficiency states detailed in the following pages a large section of the eastern population suffer from extreme deficiency of animal proteins with the result that our blood colloids are poorer in albumin content because the vegetable proteins only augment and go to from globulin content of blood notably in the lower economic level group

Such persons when get diarrhoea or dysentery or on starvation show further decrease of albumin ratio of blood thus

stand illnesses and surgical interferences generally badly, as detailed already

**Treatment Prophylactic**—When there is a hereditary tendency, a regular check should be kept on the body weight *Any increase should be promptly remedied by dietetic restrictions* and by increase of physical exercise

**Curative**—In cases already developed the reduction of weight should be near about a pound per week The caloric value of the patient s diet should first be determined and generally it will be found to be more than 3000 calories and the incriminating substances may be excess of carbohydrate and fat. Sugar potatoes cakes sweetmeats rice bread etc should preferably be cut down Wines and beers should be eliminated altogether If after due trial this proves ineffective a *dietetic* regimen containing about 1100 calories with not more than 20 to 30 grams of fat and 85 grams of carbohydrates allowed The remainder should consist of lean meat fish cheese, egg and fat free milk Proteins in sufficient amounts appear indispensable in cases in which body weight is to be reduced and in order to prevent the risk of under nutrition of the parenchymatous organs *Intake of salt and water should also be restricted* A diet like the one advocated at the earlier stages of initiation of treatment of diabetes mellitus with the addition of a little extra meat fish or egg and for the vegetarian preparations of lentil or dal and milk products like milk casein (channa) cheese curd (dahi or soured milk) to supply enough protein is likely to be useful

*There will be some refractory cases who would not respond* by reduction of weight up to expectation even on the above restricted diet and physical exercise These are generally **hydrophil besides being adipophil** and require combined treatment of dietetic and diurectic regime Diuresis is generally produced by oral administration of ammonium chloride to render the urine acid then by intramuscular or cautious intravenous injection of neptal esidrone or salyrgan group of mercurial diuretics at suitable intervals and dosage Physical exercise should not be too vigorous and strenuous but gradual and graded according to capacity and tolerance in view of causing *damage to an already fatty heart*

The estimation of basal metabolic rate and administration of small doses of **thyroid extract,** viz half to two grains twice daily five days in the week may be tried and will be useful where endogenous obesity is combined Recently amphetamine of popularly known as benzedrine sulfate in 5 mgm doses half an hour before each of the principal meals, have been effective in reducing the usual generous appetite of the obese thus reducing intake assist lessening of weight

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Such persons when get diarrhoea or dysentery or on starvation show further decrease of albumin ratio of blood thus

comes a stage when normal endosmosis inside the blood vessels is no longer possible with the result that **oedema** starts to develop from the feet and inferior extremities to go upwards

The main factors in its causation appear to be the following in their order of appearance (1) A change in the pH of the tissues towards **acid side** due to accumulation of products of metabolism which should normally have been withdrawn inside *the blood vessels to be excreted out* through *normal channels* which now is impossible due to hypoalbuminaemia and thus lack of endosmosis (2) Such albumin poor blood cannot properly nourish the endothelium of the capillaries and thus they become **hyperpermeable,** (3) allowing fluids out to dilute the asphyxiated acid tissues containing carbondioxide lactic acid and other metabolites (4) Water cannot be retained long without the **sodium ions,** hence sodium retention tends to increase this oedematous state Nephrotic and subacute nephritis oedema is also due to almost identical pathology except that in these cases the albumin is lost per kideny whereas in these cases through the intestines in chronic dysentery or diarrhoea thus there is not only loss but also absorption is prevented through intestinal flux

In our investgation on this colloid balance studied nearly over hundred patients in various stages of oedema we found that with the rise of the albumin content of the patient s blood whose lack led to *the oedema not only* at times the urinary output increased but also the oedema lessened till with further increase the patient gradually became oedema free At the initial stages of recovery, physical exercise and intake of common salt or excess of water increased this oedema to be unaffected later on when the albumin content reached near about normal

**Treatment**—Consists of the following principles

(1) Check intestinal flux by curing the chronic desentery and similar troubles by sulpha or other therapy

(2) Withhold salt and water (3) Give an *easily* assimilable protein diet consisting mostly or milk casein eggs fish meat and vitamin complex of special use is vitamin B complex by injection then orally once the assimilation and absorption is established (4) symptoms as they arise

# VITAMINS AND DEFICIENCY STATES

**Introduction**—The pioneer works of Hopkins Funk and others *demonstrated that a sufficiency only of the* proximate principles like proteins fats carbohydrates minerals and water was not adequate for growth nutrition etc. In order to make them adequate scientifically additions of certain substances may be even in traces to be called **vitamins,** appear indispensable Prolonged lack of these substances from the dietary lead

to definite morbid states—most of which are of specific nature These vitamins appear to act by helping regulation assimilation and ultimate utilisation of the proximate principles of food

Some of them are present in combination with fats hence called **fat soluble**, and are A D E K. and others yet undetermined and others are found in vegetables and other articles of diet called **water soluble** uch as B complex C P and others Though there are specific lesions in advanced stages of deficiency of these vitamins there are numerous subclinical states and subhealth traceable to their deficiency

## CLINICAL CONSIDERATIONS

**Deficiency is expected generally under the following conditions besides others**

I **Inadequate intake** which may be due to 1 **Poverty** 2 **Ignorance** of proper dietary notably about vitamins. 3 **Therapeutic** as in prolonged treatment of duodenal ulcer diabetes mellitus dyspepsias and others 4 **Gastrointestinal upsets** due to diarrhoea or indigestion or dietetic fads or in jaundice fat not being properly absorbed A D E deficiency may occur and is not uncommon 5 **Absence of teeth** prevent proper mastication thus prevents absorption of food and vitamins 6 **Too much glucose** given intravenously require adequate B for its complete oxidation

II **Inadequate absorption** in (1) Persistent vomiting as in pyloric or eosophageal stenosis chronic intestinal obstruction hyperemesis gravidarum (2) Chronic diarrhœa and cathertic habit (3) Short circuiting operations reducing surface of absorption (4) Achlorhydria achylia and also in deficient intestinal secretions and others notably in elderly women and more common in certain families

III **Increased need in** (1) Infections notably when long tanding as in tuberculosis typhoid fever suppurations osteomyelitis and such others (2) **Pregnancy and lactation**—make an extra demand which may mount up to five times more than normal notably that of—B complex (3) **Increased and violent physical exercise or exertion** require more vitamin (4) **Raised basal metabolism** as in thyrotoxicosis or nervous strain etc because a person at rest in bed with minimum of food requires the minimum of vitamins

IV **Disturbed utilisation**, (1) Persons with liver disease and jaundice cannot properly utilise the vitamins (2) **Diabetic** patient requires more B and probably other vitamins as well

V **Disturbed distribution**—Arteriosclerosis may make the distribution of vitamins to different parts of body unequal The aged require more than the adults again growing persons require more than the adults

**Factors of safety working during deficiency states—**

(1) The **margin** between chronic ill health due to deficiency and slight subnutrition is wide hence moderate lack may not show manifestations for sometime (2) **Rest** in bed minimises vitamin requirement hence all seriously affected need treatment under bed rest (3) Some of the vitamins are stored in the system in cases of chronic deficiency probably a protective mechanism

**Principles of therapy**—(1) Every case need individualisation and the requirements should be estimated carefully on their own respective merits (2) A diet scale of near about 4 000 calories should be given with proportional amounts of the respective proximate principles (3) Bed rest economises vitamin need (4) There is generally multivitamin deficiency than the want of any individual factor except dietary fads, etc

# DEFICIENCY DISEASES

## RICKETS

**Definition**—Rickets is a deficiency disease of infants with improper utilization of inorganic constituents of bone the latter showing some characteristic changes with a tendency to susceptibility to infections notably of gastro-intestinal respiratory and other tracts

**Etiology**—Sun s rays or rays from mercury vapour quartz lamp acting directly on the sterols e g ergosterol the precursor of D vitamin under the skin activate to vitamin D and is excreted in the fat of the milk of the mother or that of the cow and other animals D vitamin may also be supplied as a supplementary to diet Lack of this vitamin in the mother s milk or in the diet of the baby is the primary cause of rickets In its absence the utilization of calcium and phosphates the latter being more important from the gut is improper resulting in lack of calcification of the osteoid tissues of rickets by deposition of calcium phosphates as is done normally Excess of cereals or proteins also seem to have an antagonistic effect of vitamin D and is ricketogenic here addition of D vitamin or codliver oil generally cures The ultra violet rays of the sun seem not to penetrate very dark skin and glass probably this is one of the reasons why rickets is rather common in American Negro babies Absence of good sun light in temperate climates and lack of its proper utilization in the tropics are contributory causes The old Indian custom of exposing the babies anointed with oil to the sun during the first few months of life is a salutory practice whose rationale modern science has taught us only lately

**Predisposing factors**—Age 6 to 18 months common r though adolescent and other forms of rickets have been described

ı —Commoner in winter and spring also after rains in the s when the sun s rays cannot be fully utilised *Locality* nmoner in temperate zones and in large cities where sun s ire obscured by houses etc improper diet, unhygienic living bsence of sun s rays the above knowledge is being more ively utilized and rickets is much lesser now than it was ly

ıthology —The essential lesions of rickets is a great effort ıe formation as *is shown by large osteoid tissues at the* ıses of bones which fail to be calcified with defective de ın of the actual minerals. The epiphyseal ends are soft an be cut easily with a knife The degree of involvement long bones is proportionate to the rapidity of the growth epiphyseal cartilage as in costal cartilage lower end of mur and upper end of humerus etc Instead of the normal ıess of about 2 mm the affected epiphyses may measure 10 12 to 15 mm in thickness It is highly vascular and *nder hence the ends of the bones are more prominent.* The lar layer of the periosteum is thickened

he calcium phosphate content of bones instead of being ılly about 63 per cent in rickets may be as low as 25 per hence the softness of the bones bending easily and giving green stick fractures The calcium and phosphate content d of being normally 10 mg and 5 mg respectively in s *comes to as low as 6 and 2 mg respectively* In rickets lasma phosphate increases during the active stage of the e and comes towards lower normal figure as the patient ıves. The liver may be enlarged and fatty Spleen is ly enlarged due to increase of fibrous tissue The lymph s also enlarge

**linical manifestations —General** —The patient is generally than six months in age with or without the history of in r feeding may be brought with manifestations in the r spring *or any time of the year complaining of irritability* **ssness sweating round the head** at night or with the histo y *apidly turning the head from side to side on the* **thus rubbing off of the hair at the back of the above the neck,** specially at the sides or for **delayed denti** or starting to work very late or learning to talk later than l or in advanced cases **bowing of the legs** or for some respira or gastro intestinal infections coming as a complication of ts The patient may look apparently well nourished but is rally flabby and pale

**Bones** —Enlargement at the epiphyseal ends causes the ends ıe big bones look like knobs This in the *row on the ribs at* costochondral junction is called **rickety rosary** Softening ıe long bones *of the leg or the arms cause* the tibia to bend

forwards and outwards Bowleg , and the chest sinks in at a line of the junction of the ribs and the cartilage so that a broad groove forms running down and outwards towards the axilla **(Harrison's sulcus)** The sternum may be prominent and the outline of the **chest triangular (pegion breast)** due to failure of proper expansion **Pelvic bones** being soft the acetabulum goes inside while the child starts walking giving rise to **contracted pelvis** with far reaching consequences at child bearing in a female Sometimes the pelvis may be flat also Green stick fractures are not rare **Skull**—**Bossing** of the skull due to prominence of the frontal or parietal eminences **(hot cross bun appearance)** The **anterior fontanelle which should normally close near about the eighteen month remains unclosed for a much later period** Occasionally there may be softened areas of the skull yielding on pressure and a parch ment like *feel may not be rare*

**Muscles**—The muscles are **flabby and weak** and the liga ments lax so that the limbs may be made to bend in any direction The liver and spleen are both palpable, may partly be due to the displacement secondary to chest deformity or du to their intrinsic enlargement Lymphatic glands may also be palpable **Blood** usually shows also a secondary anaemia with low calcium and phosphate and high phosphatase content

**Digestive**—The patient looks pot bellied **Digestive distur bances,** diarrhoea distension with fatty pale offensive stools ar not uncommon

**Respiratory**—There is often catarrh bronchitis broncho pneumonia may be associated These undue susceptibility to various **infections** is most probably due to simultaneous A vitamin deficiency likely with D deficiency both being fat soluble

**Nervous system**—The hyper irritability of the nervous system with a tendency to spasmophilia causing laryngismus stridulus *tetany and convulsions from trivial causes are common* facts worth bearing in mind

**Skiagram** shows first the disappearance of the sharp margins at the ends of *metaphysis long bones lower ends of the* radius ulna or femur later the diaphyseal end is cupped and epiphyseal line widened

**Course and complications**—Unless properly treated in time the child on walking due to weight of the body may show bowing of the long bones contracted or triangular or flat pelvis etc Dwarfism due to failure of the growth of long bones may be there **Complications** consisting of easy infections of the respira tory and gastro-intestinal systems and hyper irritability of the nervous system have already been detailed

**Diagnosis**—In fully developed cases there is hardly any difficulty but one should remember that an uncomplicated case of rickets is not likely to be thin and emaciated but pale and flabby and may even look well nourished Sometimes complications like broncho-pneumonia, diarrhoea or dysentery or repeated convulsions may obscure the basic deficiency state The suggestive points are delayed dentition, open fontanelle (anterior) after eighteen month or later may be rickety rosary, anaemia flabby appearance, etc The history of head sweating and turning from side to side with rubbing of the hair at the sides above the neck and a skiagram may help too

**Differential diagnosis** **Hydrocephalus**—The rickety head may simulate this condition but the hydrocephalic skull is more globular bulges above the ears and the fontanelle is tense may be with open sutures of the skull bones In marked cases the eye balls are *pushed downwards*

**Congenital syphilis**, may be suggested by the history of repeated miscarriage in the mother rashes in the child may be with other evidences of congenital syphilis positive Wassermann reaction of blood and a therapeutic test may clear up the issue

**Caries of the spine**—Kyphosis of rickets may be mistaken for caries spine but in the latter the curvature as a rule straightens out when the child is held up by the armpits In severe cases this may not occur when other clinical points and a *radiogram settle the diagnosis*

**Acute poliomyelitis**, may suggest itself but the retention of tendon reflexes and other signs and symptoms of rickets should put us on the right line

**Prognosis**—It is good when diagnosed and treated early In untreated *late cases deformities may have far reaching effects* Supervention of respiratory and/or gastro intestinal complications or convulsions or laryngisums stridulus may carry the patient away making good the dictum of Sir William Jenner in its indirect results rickets is one of the most fatal diseases that peculiary *affects* childhood

Other varieties of rickets may be (1) **adolescent rickets**—seen generally between 9 to 14 year the subject might have suffered from genuine rickets in childhood hence called recrudescence rickets (2) **Renal rickets** may be met with in children having renal *insufficiency* Osteoid tissue is formed in excess but no calcification takes place hence deformities occur The patient is usually undersized and the causation though poorly understood may be due to retention of phosphorus and other important biochemical changes In some the primary defect may be in the parathyroids the renal change being secondary (3) **Coeliac** rickets or coeliac dwarfism In coeliac disease having huge

frothy fatty stools in young children there is marked osteoporosis with a tendency towards spontaneous fractures and occasionally there is typical evidence of rickets at the epiphyses The etiology lies in faulty absorption of *calcium from the intestines*

Bone changes in the **Gaucher's disease** The marrow cavity is infiltrated with large lipoid filled Gaucher s cells Owing to a similar infiltration the outer layers, which may look coarsely vacuolated or may be greatly thinned so that spontaneous fractures occur The vertebrae suffer severely their bodies may be crushed easily resulting in spinal deformities In skiagram in addition to general decalcification there may be large defects in the bone with thinning of the outer membranes

**Treatment —Prevention** Both codliver oil and ultra violet rays prevent in early babyhood During pregnancy mother s diet should contain adequacy of D vitamin As the infant s principal food is mother s milk so the mother should receive adequacy of D vitamin during pregnancy and lactation

Babies fed on mother s milk or artificially reared up should receive adequacy of D vitamin by the end of the first month onwards About 700 to 1 000 units of D vitamin is the daily requirement of a baby of six months and this amount is likely to be represented in one to two spoonfuls of good codliver oil This should have to be continued until the child is three years old Those who cannot tolerate codliver oil may be given one of the vitamins concentrates containing A and D vitamins Children not being able to tolerate this even may be treated by exposure to ultra violet rays

Once fully developed there is found on experience not only a deficiency of D vitamin but also of the A vitamin because both are fat soluble and hence the deficiency is more likely to be a combined than that of a single one only This lack of A vitamin probably is the cause of so much susceptibility to all infections notably of the gestrointestinal and respiratory tracts mentioned already

## BERI BERI

**Synonym** —Polyneuritis endemica Kakkee hydrops asthmaticus Barbiers

**Definition** —Beri Beri is a deficiency disease caused by lack of vitamin $B^1$ characterised by polyneuritis oedema heart affection etc There may be other additional factors responsible for the production of it The disease appears to be less common now than it was formerly

**Etiology —Geographical distribution** —It is common in tropical and subtropical countries like China Malava Japan Philippins Dutch Indies and the coast of Burma and certain valleys therein Also certain parts of Assam Bengal North East

coast of Madras amongst people whose diet mainly consist of polished rice devoid of pericarp rich in vitamin B1 New Found Land in the artic region where fish is the staple diet of the people beri beri is said to be common mainly due to the lack of the same vitamin

**Season** —Commoner in the rains autumn and early winter in the tropics

**Age** —Breast fed babies suffer due to deficiency of B[1] in mother s milk Otherwise common in all ages reaching maxi mum in adult life Children up to six years of age are least affected

**Sex** —Though both are susceptible males appear to suffer more

**Race** —Those who consume exclusively polished rice are commoner subjects

**Theories of probable causation** —(1) Prolonged lack of vitamin B[1] water soluble partly thermolabile present in the outer layer of the pericarp and embryo of the rice grain removed durin over milling is the main cause The presence of pyruvic acid in the blood urine and cerebrospinal fluid can now be taken as an indication of B1 deficiency It is now also established that an adult taking 3 530 calories of diet particularly when mostly composed of polished rice requires about 515 international units vitamin B[1] to utilise the carbohydrate and thus prevent beri beri and 200 units appear to be in the beri beri danger line Pyruvic acid by itself is nontoxic but its presence indicates dysfunction of cells particularly the highly delicate nerve cells may thus suffer and become vulnerable In endemic beri beri zone in a particular locality the crystaline vitamin B1 content of daily diet averages about 0 5 mgm daily per head Excretion experiments *in urine in England show that well to-do patients excrete 20* international units per day hospital patients 5 units and excretion is of 3 5 or less international units per day in actual cases of beri beri polyneuritis and other deficiencies Quantitative estimation of B1 in the human urine appears also to give some clue

Lack of aneurin B[1] may not be the *only factor in all* cases It is not unlikely that deficiency of good proteins and other defects in a fundamentally poor diet may play a par in the production of beri beri Hence true beri beri may there fore be not due to complete absence of vitamin B[1] but may be due to an insufficiency of proteins also Evidence in Indian epidemics suggests substitution of under milled rice for over milled variety will cause beri beri to disappear McCarrison thinks that a metabolic toxin is also at work besides B[1] deficiency in the causation of beri beri

As has already been emphasized that the vitamin need increases considerably during physical exercise lactation pregnancy surgical operations and during infections or in conditions of faulty absorption from the intestines due to dysentery diarrhoea etc all act as predisposing factors There may be some relation between beri beri alcoholic polyneuritis Korsakoff s syndrome and may be also with Landry s paralysis Here again how far a hypoproteinaemia of blood may be a causative factor of oedema in the wet type of this disease it is difficult yet to say

**Pathology** **Nerves** —There is a degeneration of distal end of the peripheral nerves with secondary atrophic degeneration of the muscles including the heart muscle showing fatty change as sometimes in cases of diphtheria Centres of nerves in the anterior or posterior horn cells and in sympathetic ganglia also show degenerative changes The vagal root at the floor of the fourth ventricle is almost invariably degenerated **Microscopically** there is from slight medullary degeneration to complete destruction of the nerve Recent work tend to show that regenerative processes occur side by side with degeneration and as a rule some fibres in the vagus and sympathetic escape pecially those twigs of the former nerves (vagus) which supply the heart muscle bronchi oesophagus are usually unaffected According to Vedder the membranes of the spinal cord are oedematous and congested scattered fibres in all tracts or paths show the same kind of degenerative change as is seen in peripheral nerves

**Circulatory changes** —The heart specially in the wet type shows enlargement of the right side sometimes with extreme venous congestion along with dilatatoin of the right auricle The heart muscle shows intercellular oedema and thus fail to contract properly Oedema of the tissues explains many symptoms like oedema lungs serous effusions and also collection of fluid in the pericardium, pleura peritoneum cellular tissues etc This water logged anasarca and serous effusions may be a characteristic of wet type of beri beri

**The adrenals** may be enlarged and according to McCarrison the systemic oedema is due to hypersecretion of the adrenals **Alimentary changes** are congestion a specific duodenitis has been suggested

**Clinical manifestations** —Generally the condition may be manifest in 80 to 90 days of feeding on polished rice Usually though insidious in onset may be very fulminant in some and the signs and symptoms are very variable

Prodromal symptoms may refer to the **gastro-intestinal system** like anorexia heaviness and improper digestion sore tongue flatulence diarrhoea etc **Nervous symptoms** like ting

ling numbness specially in the inferior extremities pain in the calf muscles **mental changes** like moodiness apprehension lethargy etc **circulatory symptoms** like palpitation shortness of breath undue weakness easy fatigability oedema of the inferior extremities may be noted It is generally *afebrile* except at the earlier stages when there may be slight pyrexia

**Clinical types,** may be **larval type** or rudimentary type This may be the earlier manifestation or may be a mild form of the disease sometimes manifesting patchy anaesthesia diminished or later absent knee jerk with or without palpitation shortness or breath etc

**Average wet type**—It may come on with prodromal symptoms referable to any or some of the systems already detailed patchy anaesthesia slightly diminished to loss, of knee jerk palpitation breathlessness on slight exertion and tachy cardia may be present for a few days. Gradually he becomes weaker and cannot stand from the squatting position **Varying grades of oedema** starting from the feet gradually spreads up passing on to anasarca hydrothorax hydropericardium The **heart shows enlargement** notably of the right side the sounds assume a faetal character indicating serious myocardial trouble with accentuated pulmonary second sound an apical systolic bruit may be common probably due to relative dilatation or lack of tone in the heart muscles or both Usually there is a **hypochromic microcytic anaemia** and a low blood pressure **Urinary output may be diminished** and indicates aneurin excretion usually of 3 5 or lesser international units per day

**Electrocardiogram** shows waves of myocardial weakness like low voltage curves flat T and shortened P—R interval

**Course,** may be a few weeks to months in slight or severe cases Treatment improving the oedema and the cardiac and nervous symptoms both these generally lead to fatality in serious affection

The dry or the paraplegic or atrophic form of the disease may occasionally result from drying up of an already described wet case or it may be dry from the beginning showing freedom from oedema with a more chronic course and insidious onset The dominant feature is the wasting weakness preceded usually by abnormalities of sensation The calf muscles are tender on pressure though wrist and foot drop are also not uncommon The gait may be high steppage but no true ataxia or Romberg ism is present The heart becomes at first irritable as shown by tachycardia feeble pulse etc later on cardiac dilatation with feeble heart sounds and failure symptoms may close the scene This *dry* type may rarely pass on to the wet variety

**Acute Cardiac type,** usually starts with gastro intestinal prodromata already described Cardiac symptoms besides

others like dyspnoea precordial pain cyanosis feeble pulse with rapid development of right sided heart failure showing oedema prominent neck veins enlarged liver ascites insomnia oliguria and others may end the life in a day or two Rapidly enlarged auricles may press on the recurrent laryngeal nerve thus causing hoarseness of voice and sometimes aphonia Diaphragmatic paralysis is of serious indication

**Infantile forms** were commoner in Japan and Philippine when the mother suffering from an incipient form transmitted beri beri to the new born aged generally two to three months in an **acute form** The baby showed signs and symptoms of sudden heart failure like cyanosis dyspnoea muscular rigidity and other manifestations like aphonia head retraction convulsions generally terminating fatally **Chronic cases** showed gastro intestinal symptoms like anorexia precordial pain nausea vomits diarrhoea usually of a fatty type followed by emaciation anaemia oedema absence of knee jerks and sometimes paraplegia notably of the inferior extremities

**Complications,** may be sudden death from heart failure effusions in the serous sacs paralysis of the diaphragm and intercostal muscles oedema lung and glottis oliguria acute dilatation of the stomach diarrhoea dysentery etc scurvy and other vitamin deficiencies in association may complicate the picture

**Diagnosis** **Clinically** by history of intake of polished rice white floor and a general poor diet onset may be in several members of the family or locality on a similar diet are suggestive Prodromal symptoms followed either by polyneuritis or from heart affection to failure without any apparent caus like hypertension or valvular mischief or pulmonary troubles and others oedema without albumin or casts in the urine, in **the paralytic variety** the squatting test the patient with hands on the top of his head is unable to assume or rise up from that posture are highly suggestive

Hyperaesthesia of muscles with loss of knee jerk may help Adrenalin 1 mgm hypodermically brings the diastolic pressure to zero i e the auscultatory sound will persist even after complete decompres ion of the brachial artery as long as the action of the adrenalin lasts are also suggestive of the diagnosis

**Differental diagnosis**—Neuritis due to **alcohol** is diagnosed by the history where available of taking liquor, gastritis liver troubles water brash nausea anorexia tremors mental changes Korsakoff s psychosis nonendemic and nonfamilial **Arsenic** history of either treatment by arsenicals or for homicidal purposes followed by gastro-enteritis pigmentation hyperkeratosis diarrhoea abnormal amounts of arsenic content in hair

skin urine etc Subsequent foot and wrist drop in cases of survival from heavy doses of the poison etc and stoppage of the agents in question *improving the conditions all help*

**Lead** —History of exposure as a plumber type setter no sensory symptoms wrist drop due to musculo-spiral nerve paralysis other evidences like blue line in the gums constipation colic anaemia punctate basophilia etc Presence of unaccountably large percentage of lead in the urine and faeces etc all suggest

**Tabes Dorsalis** —Ataxia lightening pains pupillary changes ocular muscle palsy loss of ankle jerk but tendoachillis not painful on pressure a positive W R of blood etc, help to clear up

**Progressive muscular atrophy** —Long course wasting of the smaller muscles like interossei of the hand absence of sensory loss muscular fibrillation of the doomed muscles tendency to bulbar involvement etc will help

In the **wet form** distinction has to be made from **renal disease** where oliguria casts and albumin are present the oedema starts from the face absence of neurities and other points solve the difficulty

**Heart failure** —History of some disease like rheumatic fever hypertension syphilis etc, presence of valvular defect non epidemic nonfamilial no nerve lesion present etc should help In oedema of **ancylostomiasis epidemic dropsy** etc are differentiated by their respective characteristics

**Prognosis** —The disease appears to be less frequent nowadays than it was previously Death rate varies from five to thirty per cent but it is very amenable to treatment The dry chronic type is usually favourable provided treatment is started early But the nerves damaged in long standing cases may not come to normal at all The wet variety may kill by heart failure even when treatment is energetic Bad features are **sudden severe vomiting, quick enlargement of the heart** with grave signs and symptoms of failure

**Treatment** —Principles are (1) specific consists of exhibition of vitamins in adequate amounts Aneurin thiamine chloride etc sold under various patent names like Berin Benerva etc in *4 to 10* mg doses containing 2 000 to 4 000 international units preferably by injection as the oral route is not sure due to variability in absorption may do much good (2) Rest This should be absolute because this not only helps the heart but at once the vitamin necessity is reduced to the minimum (3) Diet should consist of good meat milk eggs fruits and B vitamins rich articles like yellow of egg liver whole meal bread etc Raw tomatoes and raw leafy vegetables well washed germinating peas and grams are useful Amongst artificial B comple

rich articles like yeast marmite bemax given in dram doses thrice daily may be of use In wet type the treatment should be as in congestive cardiac failure The rest of the treatment is mainly symptomatic

## SCURVY

**Definition**—Scurvy is a deficiency disease due to prolonged lack of vitamin C from the diet characterised by debility mental apathy spongy gums, ulceration of the mouth and a tendency towards haemorrhage and anaemia

**Etiology**—It was formerly common amongst sailors and explorers who could not carry in olden days enough of fresh fruits along with them During the war prisoners and in lunatic asylums etc it was common Generally deficiency of ascorbic acid or hexuronic acid for about four to eight months is required before symptoms develop Daily requirement of an adult is 70 to 150 mg, working men and lactating mother requiring more prolonged heating of milk fruits and vegetables destroys it Quick heating is not so injurious Modern methods of canning do not destroy or only partly spoil the C vitamin content of tin fruits This vitamin is plentiful in all fresh fruits and raw green leafy vegetables like lemon orange tomatoes raw green chilly green guavas and specially amlakies (amla) ordinary plums and others Fresh unboiled meat also contains it Drying of fruits destroys this vitamin It is also found stored in adrenal cortex In some of the temperate countries during the winter potatoes constitute the only antiscorbutic food as usually fruits are beyond the means of most poor people during winter months Addition of alkalies while cooking spoils this vitamin

**Pathology**—At autopsy haemorrhages are common in many places such as under the skin and the periosteum and sometimes also in the serous sacs But the essential underlying lesion is an inability of the supporting tissues to produce and maintain intercellular substance The effect is on cells of mesenchymal origin in contrast to the ectodermal and entodermal effects of vitamin A deficiency The intercellular substances concerned are the collagen of all fibrous tissues the matrix of bone dentin cartilage and all nonepithelial cement substance including that of the vascular endothelium The weakening of the capillary wall is responsible for the haemorrhages which form a prominent feature of the disease Haemorrhage into the adrenals is one of the earliest changes in Scurvy besides haemorrhages in other places described already

The gums are soft spongy and bleed readily and the teeth may fall out In presence of bad teeth the mouth and breath become very foul Bone formation is brought to a standstill and as the normal process of bone absorption still goes on, these

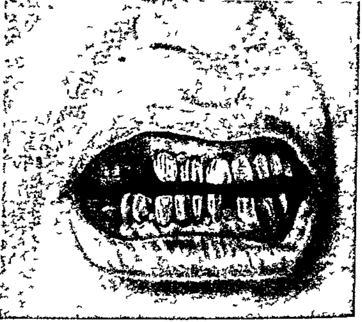
tructures become rarefied and fragile The *formation of carti ıginous and bony matrix ceases* The osteoblasts become longated *assume* the shape of fibroblasts proliferate and ıccumulate between the bone and the periosteum forming a hick layer devoid of matrix into which massive haemorrhages re common Characteristic lesions are seen at the epiphyseal ine which instead of being narrow in normal cases is broadened nd becomes dense giving a pathognomonic picture *to the X ray* ppearance Fragments of bones may be seen scattered about *nd haemorrhages are frequent* It *is not* a disturbance of alcification as in rickets but of ossification When a proper liet is substituted ostegenesis starts rapidly

**Blood** — In all forms a secondary anaemia develops and he red marrow shows a corresponding picture i e disappear ınce of fat and cellular hyperplasia Treatment with orange juice or a diet rich in vitamin C produced a remarkable effec on the blood picture for not only is their rapid regeneration of blood but there is also an immediate increase in the number of he reticulocytes

**Clinical manifestations** —It is important to remember that in case of C vitamin deficiency as with other vitamin deficiencies *there* may be only symptoms of *ill health without the typical* full blown picture of scurvy A mild manifestation of C vitamin deficiency is what is known as "**bachelor scurvy**" showing anae mia weakness and occasional ecchymoses. Besides there is lassitude dizziness on standing up bruising or bleeding from gums on slight pressure or injury The patient looks ill pale with drawn facies Pain in the inferior extremities and a charac t ristic *hardness of calf muscles may constitute a symptom* complex A **temperature** of near about 100°F may not be un common in the acute stage

**Haemorrhage and skin symptoms etc** —Follicular keratosis re embling hyperkeratosis of vitamin A deficiency is not un common There may be mosquito bite like haemorrhagic spots t the root of hairs produced on slight irritation notably in the outer side of the leg later bigger *areas of haemorrhage may* be noted which in advanced cases may form into big ulcers of an unhealthy type taking long time to get healed They are com monest in the inferior extremities and the large haemorrhagic areas appear hard brawny red shiny showing mild inflamma tion and *may pit* under pressure Such haemorrhages are common in the popliteal space at the bend of the elbow around malleoli and beneath the muscles of the jaw and may interfere with their function and mobility Haemorrhages like epistaxis and also in or/under buccal mucosa are not uncommon Bleed ing *from* the intestinal tract or haemoptysis and blood vomiting may occur Subconjunctival haemorrhage may be extensive notably when in association with spasms of whooping cough

**Gastrointestinal**—Anorexia dislike for food may be early In mouth there may be spongy gums, ulcer in the mucosa and scurvy buds may be seen at the gum margins see the figur



**Scurvy buds in alveolar margin**

the teeth may ultimately come out foul breath is common Dyspepsia may be present and constipation is the rule Later bloody diarrhoea may follow in advanced cases

**Anaemia**—C vitamin hastens erythropoiesis hence in its prolonged lack there is always a secondary anaemia with even two million R B C per cmm Poikilocytosis and anisocytosis is reported The white cells and platelets appear not to be much affected Coagulability of blood is not diminished and serum is nonhaemolytic.

**Complications,** of the respiratory system like bronchitis and bronchiolitis may follow and gangrene of the lung may be a common but dangerous complication Night blindness probably due to anaemia of retina may be an early symptom and is common in those who are exposed to bright sun

**Diagnosis.**—**Clinically** several persons being affected under the same dietetic habits living under the same conditions are helpful Sporadic cases may present some difficulty

**Differentiation** has got to be made from purpura but in it the gums are free and there is not as in scurvy an inflammatory

character of the haemorrhages No history of diet deficiency In purpura the platelets are diminished

Lymphatic leukaemia (acute) may show bleeding but is differentiated by the blood picture there may be adenitis, etc in leukaemia

**Prognosis**—Early recognition and proper treatment make the outlook good

But supervention of pulmonary or other complications or diarrhoea are bad but the gangrene of the lung is almost invariably fatal Sudden death may follow from haemorrhage or heart failure Recovery may be delayed in advanced cases where extensive haemorrhages may lead to cicatrices in the skin or ankylosis of joints

**Treatment—Preventive**—The nursing mother should receive the juice of two oranges or some tomato juice or juice of a lemon The new born baby from a few days after birth should get one to two spoonfuls of diluted sweetened orange juice Daily protective dose is 25 mgm of ascorbic acid equivalent to about 50 c c of orange juice Other raw fruits salad etc are of use Cooking with soda or heating destroys this vitamin In urgent cases ascorbic acid diluted may have to be given intravenously For an adult the prophylactic amounts are larger and notably for the infected and hard labouring class nursing mothers and others who require larger doses

**Curative—General**—The patient should be in bed at perfect rest Thus minimising the vitamin need He should be kept warm and colds carefully avoided

**Specific**—The juice of an orange should be given morning and noon daily one each time Salad made of tomatoes other leafy vegetables taken raw Indian fruits like plums amlaki (amla) apples green mangoes may be taken freely Fresh lime juice fresh unboiled milk in two cupfuls daily meat juice raw one to two spoonfuls may be of use 5 mgm of ascorbic acid appear equivalent to two teaspoonfuls of orange juice and this chemical vitamin may be taken in 25 mgm doses twice daily In more urgent cases injections are required as already suggested

**Symptomatic treatment**—The gums should be cleansed by hydrogen peroxide lotion Later on a paint of four per cent of mercurochrome solution or dilute silver nitrate solution may be of use Bowels should be attended to The diet should be adequate and square A multivitamin extracts and suitable doses of iron should be exhibited in advanced cases for the anaemia and other troubles

## INFANTILE SCURVY

Infantile scurvy is known in the continent as Barlow s disease and has all the characters of the adult disease except

due to the anatomical and physiological peculiarities of ea life

**Age**—Commonest between 8 to 12 months of life affect both sexes equally in whom the diet consists mainly of tin condensed milk dried articles and that without fruit juice e Mother s diet in the affected sucklings lack in C vitamin a this is the main cause of the disease Desiccated milk appe not so harmful

**Pathology,** is more or less the same as in the adult dise except due to anatomical peculiarity of the baby s bones The is extensive subperiosteal haemorrhage which often separat the underlying bone from it There may be haemorrhag effusions anywhere and also infarcts in lung and haemorrhag from the bowels and urinary passage are not uncommon

**Clinical manifestations**—A scorbutic diet for about 4 to months (without C vitamin) will probably lead to it

**Onset,** is usually gradual, the first symptom general being fretfulness or restlessness or refusal of food but th general nutrition may appear unaffected at this stage Th child may be brought in for extreme tenderness of the swolle tense parts nearabout the knee joint touching of which eve excites scream from the baby or for so called inability to mov the legs or bend the knees or for prominence of an eye due t haemorrhage or bleeding from the gums bowel or urinary tract

**On examination** the child is pale fretful may be wasted crying on being touched generally at the inferior end of th femur and upper extremity of the tibia There may be bruisin over the face and the body petechiae over the palate etc Haemorrhages are only seen in the gum about the neighbour hood of the erupted teeth Often the knee joint appears as if paralysed due to subperiosteal haemorrhage less commonly the hand at the elbow may similarly be affected

There may be oedema of the face or of the legs and eye may be blood in the urine stool vomits etc Temperature upto 100°F is not uncommon Blood changes are the same a in the adult type The plasma phosphatase is low

**Skiagram** may reveal subperiosteal swelling separated epiphysis or fracture Fraenkel described a white line a dense transverse shadow at the junction of the epiphysis and diaphysis

**Diagnosis**—The history the general appearance of the child the dietetic routine and story tendency to easy haemorr hages pain round the knee and the characteristic feel when present suggest the diagnosis. for other details see the previous chapter of adult scurvy

**Prognosis complications and treatment** are more or less in the same lines of scurvy detailed

## PELLAGRA

### (Alpine Scurvy)

**Synonyms** —Malde la Rosa Mal del sole Maidismus Malattia della Miseria etc

**Definition** —A deficiency disease occurring mainly in Maize eaters characterized by buccal and gastro intestinal nervous and mental disturbances and a symmetrical erythema specially affecting the parts of the skin exposed to the sun s rays Pellagra means rough skin

**Etiology** —**Geographically** it was endemic in Southern America and in Southern United States lower Egypt Turkey Rumania Balkans Spain Italy and cases reported from China Japan India parts of Africa Mexico West Indies etc whose diet is poor in quality

**Nicotinic acid or vitamin B2 or G or Pp** deficiency appear to be the principal cause but other factors of B complex like riboflavin and others and also good animal proteins and maize forming the principal article of diet partly appear to be the causes Intoxication from diseased maize diet has also been suggested to be a cause

**Age** —Common between 20 to 40 years but no age or sex is exempt though commoner in females **Season**.—Rains and early autumn **Debilitating diseases** like malaria syphilis amoebiasis tuberculosis alcoholism poverty and a poor diet contribute

**Pathology** —At autopsy the body looks wasted dermatitis may be seen on the dorsum of the hand and foot and upto the legs and sometimes extending up to the elbow affecting mainly the extensor surfaces There is atrophy of the somatic muscles the mucous membrane of the stomach intestine etc Mouth and tongue and the colon may show ulcers The heart is small the liver is either fatty or cirrhosed

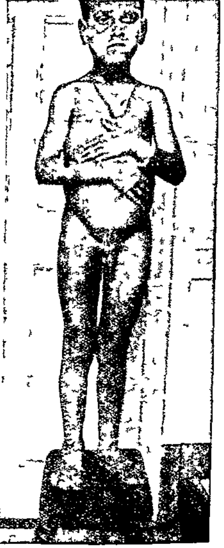
**Brain** the meninges may be thickened over the brain and the cord sometimes showing atrophy of the former There is also degeneration of posterior and lateral columns of the cord but no true peripheral neuritis

**Clinical manifestations** —**The incubation period is yet un determined** Prodromata of alimentary disturbances like sore mouth shiny tongue fatty diarrhoea anorexia common during the early spring and the symmetrical exfoliative or erythematous dermatitis of the exposed parts in the summer whereas nervous states like depression of spirits asthenia anorexia low blood pressure all the year round are common These may recur for months or years before actual serious signs of the disease set in

**Symptoms** —**Alimentary** —Variable stomatitis but the characteristic shiny glazed dry tongue may be preceded by glossitis Achlorhydria is common The patient cannot take any hot spicy article because of the intense burning sensation Fatty

or bulky diarrhoea may be with blood and mucus sometimes is seen

**Skin** —The commonly affected areas are the dorsum of the palm upto the elbows and also the dorsum of the feet upto the knees When exposed forehead and areas round the nose in a



**Pellagra, note the exfoliative dermatitis in the dorsum of foot leg and hands nd around the nose**

butterfly area may also be similarly affected They are symmetrical and resemble sun burn but has a definite edge These affected areas may be erythematous or a[illegible] tive type of

dermatitis Sometimes blebs form and blackening of the skin may follow There may be variable degree of itching and recurrences of these skin lesions in the summer followed by ameliorations in the winter and autumn are not uncommon

**Nervous**—Besides mental depression, headache insomnia giddiness in advanced stages burning sensation of hands and soles etc tremors are shown in the earlier stages The neurological features of subacute combined degeneration of the cord with spastic paraplegia may appear in some without manifestations of achlorhydria Children with pellagra may be of retarded growth but nerve complications are rare in them There is an **acute and dangerous variety** of the disease also In cases under my care some of the patients were said to have been suffering from partial insanity but the real underlying cause was pellagra because the patients got completely well under nicotinic acid and other vitamin therapy

**Course**—It is generally afebrile with tendency towards seasonal variations and exacerbations and remissions for years even Muscular wasting and mental deterioration may be troublesome and persistent

Diagnosis is made by the typical clinical syndrome of mainly three **Ds**, viz (1) **Digestive disturbances** including diarrhoea and the tongue etc (2) **Dementia and mental disturbances** (3) Typical **dermatitis** and **dermatoses** already described in the parts exposed to the sun Other clinical data are also helpful

**Differential diagnosis**—Sprue does not show the cutaneous and nervous symptoms But sometimes the clinical picture may be a complex one Yet the other typical character of spure like morning forthy diarrhoea emaciation raw beefy tongue etc will help **Spastic paraplegia** due to other causes show their respective clinical picture and again the typical signs and symptoms of pellagra are lacking Skin diseases show none of the typical manifestations of pellagra also

**Prognosis**—Mortality varies from three to forty per cent Acute cases may die in a few weeks About forty per cent may show permanent mental changes like delusions dementia etc Some may die in asylum because of the mental derangement hence the importance of early adequate treatment

**Treatment** **Preventive**—A diet containing milk egg meat fruits butter leafy vegetables yeast tablets or liver of animals and unpolished rice should prevent the disease Vitamin $B^2$ or nicotinic acid orally or in serious cases by injection may be of service as preventive

**Curative treatment**—The patient should be put to bed and 100 mgm of nicotinic acid should be given four times a day If there is cheilosis and stomatitis 1 mgm of riboflavin should

have to be added with the nicotinic acid Dilute hydroc acid in 30 to 60 drops with equal amount of lactic acid double the quantity of glycerine pepsin twice daily after may help by facilitating intestinal absorption of vitamins food products Injection of crude liver extracts or an the injectable vitamin B complex may go a great deal tov rapid recovery Peripheral neuritis requires injections o in suitable doses as discussed under beri beri

The skin should be protected from the sun The r lesions and raw blisters should be covered by one in thousand solution of potassium permanganate Good re have been obtained in skin cases by intravenous injection 10 c c of 10 per cent sodium thiosulphate solution As r of these vitamin deficiencies are to some extent associated minor deficiencies of others a combined or complex vita therapy is likely to afford better results besides this spe therapy already advocated

**Diet**—This should consist of milk eggs meat flesh fr raw leafy vegetables etc Liver or animals germinating cer like peas and grams unpolished rice are useful If the pat is on a maize diet preferably it should be stopped and subst ted by more healthful cereals like wheat unpolished rice etc

## SPRUE

**Synonym**—Tropical diarrhoea Psilosis *Ceylon* s mouth Cochin China diarrhoea Aphthae tropica

**Definition**—Sprue is a chronic gastro intestinal disorder doubtful etiology probably caused by deficiency of some compo ents of vitamin B complex characterised by flatulent dyspeps early morning diarrhoea of a frothy pale pultaceous type so tongue emaciation and deficiency of intestinal secretion wi failure of absorption of fat sugars and calcium from diet an also the anti pernicious anaemia factor the latter causing megalocytic type of anaemia

**Etiology** **Geographically** it is common in the tropic an sub tropics but cases have been reported from cold countri also In **India** specially Bombay Ceylon Burma *Ind* China Cochin Siam Queensland Java Proto rico *Malay* West Indies South America etc are the places whence cas have been reported **Season**—Commonest in late rains or autumn and also from October to November

**Race**—Though commoner in Europeans or *Anglo-Indian* or in mixed European population occasionally the upper cla of local population suffer **Age**—Commoner in the midd aged but boys have occasionally been reported to be affecte Both sexes equally suffer

**Predisposition**—For Europeans or mixed population long and continuous residence in hot plains with exhausting disease may be associated with gastro-intestinal upsets specially from hill diarrhoea dysenteries like amoebic or bacillary or colitis etc predispose

**Theories as to the causation**—Older theories. (1) Calcium deficiency of Vinnes and Scott It is probably an effect than a cause (2) Infective theory (A) Persons under identical conditions or living with gastro intestinal upsets being affected supported this theory which again may be a contributory factor only (B) Chronic amoebiasis was found in 30 per cent of cases of sprue probably a coincidental affair (C) Monilia a fungus infection of the intestine probably is a non pathogenic super infection. (D) Streptococci were thought by Rogers to be a cause and again probably is a secondary invader

3 **Endocrine deficiency**—Deficiency of parathyroid and adrenal have been suggested but there is no sure proof except that sometime medication of the respective dry glands caused some doubtful improvement

4 **Deficiency in diets and vitamins** There is some evidence that injections of crude liver extract containing B vitamin complex improve cases of sprue and Castle considers spure to be akin to *pernicious anaemia* But this does not necessarily mean that B complex deficiency is the cause of sprue Unsuitable or lack of good proteins from which the essential amino acids are required may be contributory Though lack of vitamin A and B complex in diet are suspected to be the cause of sprue yet in the diet of the class of people who suffer from it this insufficiency is very unlikely but it is not improbable that faulty absorption and assimilation from the intestine may contribute to the causation of sprue though these substances are adequately represented in the diet *Folic acid appears to be* of special use in the treatment hence its absence may be a factor

A good percentage of cases of **untreated hill diarrhoea pass on to genuine sprue**, the former is mainly due to a dysfunction and inadequacy or failure of absorption in some people having an asthenic type of intestine favoured by prolonged stay in tropics notably in Europeans Probably sprue is initiated in this way the subsequent failure to absorb the important amino acids and B complex in particular help in perpetuating this state *of malnutrition and diseased process* It is not unlikely that as in pellagra or idiopathic steatorrhoea the deficiency of nicotinic acid and riboflavin group may also be partly *the cause* of sprue later on complicated by the lack of elaboration of secretions and deficiency in absorption in persons of feeble gastro-intestinal system thus finally resulting in the atrophy of the intestines and digestive glands

**Pathology Morbid anatomy General** —The body is thin emaciated with prominent cheek bones due to lack of subcutaneous fat Dry wrinkled skin may show malar pigmentation In advanced cases small petechial or purpuric spots of haemorrhage may be noted

**Alimentary system** —The tongue is red, shiny due to loss of epithelium and the papillae The chief changes in the intestine are thinning an atrophy of the mucous membrane of the absorptive and secretary epithelium which is a part of the general malnutrition Occasionally there may be ulceration and perforation in the ileum

**Liver and Spleen** are atrophied to almost half the normal weight Pancreas occasionally shows slight inflammatory changes in the connective tissues with areas of fatty or granular degeneration

**Heart** is small and shows brown atrophy Kidneys and adrenals share the same atrophic changes The mesenteric lymphnodes may be enlarged pigmented and fibrosed **Anaemia** may be due to (1) diarrhoea causing malabsorption of iron and haemopoietic principles (2) achlorhydria or hypochlorhydria (3) in some due to lack of intrinsic factor in the stomach due to atrophy of glands **Bone marrows** At first at the initial stages with hypochromic microcytic anaemia the bone marrow reaction of hyperplasia is only slight and the change is normoblastic In the common macrocytic anaemia of later stages the bone marrow shows a megaloblastic reaction

**Blood changes** —Initially there is a hypochromic microcytic anaemia to be later on macrocytic but may be also hyperchromic as iron and the antipernicious anaemia factor are not absorbed The colour index is usually above one Anisocytosis is common Poikilocytosis is less prominent than in pernicious anaemia The size of the red blood cells varie between 8 to 8 6 m The Price Jones curve shifts to the right with a spreading wider base

**Biochemical changes** —The normal **calcium content** of blood of 9 to 11 mgm is reduced to 7 to 9 mgm per 100 c c of blood The **phosphorus content** is normally nearly of 3 2 mgm per cent The **absorption of sugar** from the intestine being slow oral administration of glucose shows very little increase in glucose content whereas intravenous injection of glucose shows a sharp rise in the cruve in blood and of the defective tolerance type due to deficiency of insulin secreted and other associated defects The bilirubin content of blood is little above normal **Cholesterol content** of blood from normal comes down to 50 to 70 mgm per 100 c c of blood, due probably to defective absorption of fats The plasma albumin content is lower than normal thus formation of oedema is easy

**Gastric content** —Fractional test meal shows hypo or achlor hydria About 30 per cent show achlorhydria even after histamine injection In intense anaemia achylia may be seen

*Faecal analysis* —The large pale forthy pultaceous stool owes its bulk to unabsorbed fat Normally in dry stool 10 to 20 per cent of its weight usually consists of fat but in sprue due to defective absorption this fat content may rise from 25 to 50 per cent or more There is defect n splitting up of fat and though the average pancreatic digestion is normal yet lack of absorption may partly be due to hurrying down of the intestinal contents through the small intestine

*Urine* —The urine is highly coloured due to increased urobilin or urobilinogen content derived from pigments resulting from excessive destruction of blood specially in anaemic cases Indican is present probably due to indigestion

*Clinical manifestations*, are very variable The onset is usually very insidious and may date back from an attack of dysentery diarrhoea or hill diarrhoea associated or not with sore tongue and mouth The following may be the clinical picture of an average case

**General**—The patient complaining of weakness langour lethargy loss of weight lack of memory and power of concen tration, irritability etc He is pale the skin is loose wrinkled muddy in complexion the cheeks may be pigmented so may be the forehead also emaciation may be pronounced A low grade of fever may be present **The mouth is sore, the tongue *shiny*, *glazed*, *the buccal mucosa may also share this loss of* mucosa**, the patient is unable to take anything hot acid or salty all causing burning **Abdominal** compliants The appepite may be capricious or whimsical Discomfort flatulence with borborygmi specially at night somewhat relieved by the easy passage early in the morning of one or several typically large bulky yellowish stools which as the disease progresses change to pale frothy bulky type the motions coming out as if by them elves without any straining or discomfort complete the clinical picture of sprue On examination the abdomen may be dis tended with gas specially towards the evening and may show occasional visible *peristalsis* *In the morning after passage of* big stools the thinness and the atrophy of the gut and of the abdominal wall become very apparent There is a doughy feel Pain or tenderness is rare except in association with amoebiasis or other superimposed infection

**Liver and Spleen** are impalpable and their areas of dull ness reduced due to atrophy and gaseous distention of the intestines Stomach shows *atrophic gastritis* The **stools** are large bulky pale forthy due to the large amount of unabsorbed fat content Carbohydrate and sugar fermentation may lead

to its acid reaction and acid smell Under the microscope there are plenty of bacteria, yeast cells and fatty acid crystals The stool on **culture** yields streptococci, monilia and other fungi

**Heart,** is smaller than normal Haemic murmurs are frequent the blood *pressure is low* *Oedema of the inferior* extremities is not at all uncommon Blood changes have already been described besides what has been said there may b leukopenia with lymphocytosis In the **nervous system** due to hypocalcaemia may show signs of tetany and the nerves ar hyperirritable giving rise to Chvostek s sign consisting of spasm of the facial muscles on tapping the facial nerve at its exit behind the lower part of the lobule of the pinna of the ear Trousseau s sign or carpopedal spasm on pressure on the peripheral nerves of supply may be present Due to the wasting of the mus les there may be tingling numbness and absent knee jerk these *sensory changes may be due to poor blood supply* and other associated changes also

**Types of the disease**—Though the clinical picture given above conforms that of an **average case** yet there may be (1) **gastric sprue** howing all the characters such as sore tongue etc but the bulky stools are more or less solid instead of being loose (2) **Irregular sprue** with variable periods of remission and exacerbation and not with the absolute typical signs an l symptoms (3) **Intestinal type** in which the mouth and stomach unaffected the tongue and buccal mucosa being norm al yet the diarrhoeal stool etc are sprue like (4) **Sprue without diarrhoea** where *the tongue and mouth symptoms persist* but the diarrhoea ceases under treatment (5) **Tongue and mouth sprue,** involves the tongue and mouth etc without diarrhoea

**Course,** may be 2 to 10 or 15 years with remissions and exacerbations

**Complications, and sequelae** are not common in comparison with the seriousness of the malnutrition Commoner ones are *(1) anaemia which is like that of pernicious type specially* in long standing cases (2) Subacute combined degeneration has been known to occur (3) Neuritis (4) Oedema due to hypoproteinaemia notably for hypoalbuminaemia (5) Tetany *in a small percentage* (6) Purpuric rashes (7) Dermatitis may be of a pellagral type **Rarer** complications may be (1) acute diarrhoea (2) sometime constipation (3) secondary infections like colipyelitis pneumonia (4) cardiac failure, (5) insomnia venous thrombosis etc

**Diagnosis**—In the typical case the diagnosis is easy but in atypical cases it may be difficult **Clinically** the abdominal discomfort is more pronounced in the evening the passage of frothy bulky pale stool early in the morning the typical raw tongue and mouth progressive loss of weight and emaciation pallor thin abdominal muscles and atrophied intestinal coils the

peculiar doughy feel of the abdomen all help *Laboratory data* like the stool showing great proportion of fatty acids monilia yeast etc Fractional test meals manifesting absence or lack of acid and the typical blood picture when present are helpful Biochemical data like hypocalcaemia hypocholesterolaemia the flat sugar tolerance curve the blood showing typical changes like pernicious anaemia and the urine with excess of bilirubin and indican are highly suggestive

**Barium meal examination** of the intestines under the X Ray may show absence or poor mucosal pattern and hurrying down of the contents of the intestines as in diarrhoea gas may be excessive

**Differential diagnosis**—**Hill diarrhoea** may be difficult to distinguish because sprue may be grafted at the end of it but the history of onset first at an altitude above 6000 feet and getting better in plains or at lower altitude specially at the early stages of disease differentiates from sprue which remains unaffected at lower heights

**Chronic pancreatitis** may give history of pain or tenderness in the epigastrium the stool contains much neutral unsplit fat presence of cammidges crystals and the reaction high diastatic reaction in the urine and the absence of oral and buccal lesion typical of sprue are helpful

**Coeliac disease,** is common in children the tongue and mouth symptoms are lacking The stool is not so frothy and pale but may be more solidish Tetany and bony changes are commoner and the anaemia is usually hypochromic (But the cause may be the same deficiency the adult showing sprue the child coeliac disease)

**Giardiasis**—There may be pain or griping near the umbilicu diarrhoea in bouts may alternate with constipation finding of the cysts or the vegetative form are diagnostic The anaemia is seldom hyperchromic in giardiasis

**Pernicious anaemia**—Family history the lemon yellow complexion of the flabby apparently fatty individual with no emaciation lack of the typical stools presence of achylia hyperbilirubinaemia and the typical blood picture all help

**Intestinal carcinoma**—Age usually above 40 may be constant pain alternate diarrhoea and constipation blood and mucous in stool lacking the typical characters of sprue stools may be a palpable mass skiagram after barium meal or enema sigmoidoscopy no macrocytosis and others generally clear up the difficulty

**Pellagra**—The typical sore tongue cheilosis symmetrical skin lesions on the dorsum of the feet and the hands with mental and nerve symptoms and nicotinic acid curing the condition help in the diagnosis

***Principles of treatment***—(1) Dietetic (2) General (3) Symptomatic (4) Correction of deficiences and other troubles

Though no specifics have been found yet injection of vitamin B complex is useful, and as the intestinal absorption is faulty oral medication may not be of much use Intramuscular injections of some good potent crude liver extract in two to five c c doses and folicacid riboflavin and nicotinic acid are the main remedies In some cases small doses of castor oil as emulsion given early in the morning to remove the irritant products in the intestine followed by a non irritating bland diet consisting of milk properly skimmed in 4 to 8 ounces every four hourly with or without beal fruit or ripe bananna and dilute hydrochloric acid 20 drops with pepsin grains 10 after meals may be of use **Fruits** should be given as juice initially in small amounts If a diet like the above proves unsuitable skimmed butter milk or ghole or lassi Sprulac (Cow and Gate) may be tried Dextrimaltose is more easily digested than other sugars Fats and carbohydrates should be restricted The caloric requirement should be built up from 500 gradually to 3 000 in a few weeks or months The gradual building up of the scale of diet from skimmed milk to a more solid one comprising of meat lean fish liver soups of marmite and other substances rich in B vitamin appear to be of special use

In four to six weeks the patient may take in addition to the above fully boiled soft chicken, lean fish vegetables like onions cauliflowers peas and also soft rice etc thus gradually revert on to normal dietary As already emphasized B vitamin complex and folic acid being of special use such articles of diet as liver in various forms marmite bemax and any suitable vitamin complex of B should be given freely But at the initial stages due to very defective absorption neither the vitamins in food nor in medicine given orally may be of much use hence the importance of giving injections of B complex and folic acid as already stressed

**General** —The patient shouuld be strictly confined to bed and kept warm and a suitable abdominal binder to prevent the abdomen from getting chilled is of special service All sources of sepsis in the body particularly bad teeth should be brushed cleansed and the gum massaged regularly and the local application of 1 per cent solution of mercurochrome in distilled water need be enforced twice daily morning and night Mouth washes like Listerine or Glycothymoline may be of comfort During treatment notably on improvement there may be constipation which should be properly and judiciously relieved by mild aperients

**Symptomatic treatment** —The sore mouth is mainly due to deficiency of nicotinic acid riboflavine and other components of B complex and other factors hence they should be supplied adequately but the hygiene of the mouth also need be taken care of

The anaemia should first be treated by injection of liver extract and other suitable preparations of B complex supplemented by liver soup marmite bemax and other digestives and later, once he has improved followed up by iron and other antianaemics Diarrhoea is best treated by an initial cleansing dose of castor oil in the morning and followed by hydrochloric acid and pepsin after meals Osmokaolin with charcoal may be used the latter is of special use in diarrhoea with excess of gas Tetany should be treated by adequate doses of calcium and parathyroid

**Convalescence**—Fruits like green bananas baked apples and baked or ripe beal papays strawberries and ripe tomatoe ripe bananas with milk may be of special service of particular u e may be the beal fruit in various forms ripe green roasted with sugar If there are any associated diseases like amoebiasis dysentery malaria etc they need proper and prompt treatment For Europeans or those who can afford a change to a coole place might improve matters

# DISEASES OF THE KIDNEYS

**Kidney and its relation with the system**

Though we cannot see the kidneys yet a great deal of information regarding their structural and functional alteration may be derived by a complete clinical examination of the urine The cardiovascular system the condition of blood tissue fluids and others are intimately associated with the health and proper functioning of the kidneys hence in their disease not only the examination of the urine is essential but a test of the functions of the kidneys survey of the heart blood vessels the blood pressure the blood biochemistry to ascertain the urea and non protein nitrogen content of blood ophthalmoscopic examination of the retina and its blood vessels fundusoculi etc may throw considerable light on the actual state of health of these two little but very important organs having more than one million nephrons in each

## URINARY FINDINGS IN HEALTH AND DISEASE

The total quantity of urine passed in twentyfour hours by an adult is about 1 500 c c or about 50 ounces of which more than **two thirds** is passed during the day and about **one third** during the night This quantity varies with the amount of fluid imbibed physical exercise activity of the skin season and atmospheric temperature and other factors More urine is passed in the winter the cutaneous evaporation being lesser than during the *summer* Diarrhoea cholera vomits etc tend to cause oliguria or even anuria Tea coffee pituitrin and diure

tics increase urinary output Females excrete less children lesser still Tropical and individual variations may be considerable

The acidity of normal urine is nearabout pH 4 7, i e slightly acid which is mainly due to dihydrogen sodium phosphate and requires about 80 to 120 grains of bicarbonate of soda orally to make it temporarily alkaline This slight acidity prevents the growth of bacteria in it hence besides as a source of excretion of acids it also exerts a *protective function also helps to regulate* the acid base balance of the system Acidity increases in fasting or after taking of drugs like acid sodium phosphate, ammonium chloride and others The alkaline tide after meals is due to (1) secretion of dilute hydrochloric acid in the stomach and absorption of alkaline secretion of the pancreas and small intestine (2) Absorption of alkaline salt from a vegetable diet The normal **specific gravity** of a sample of twentyfour hours collection of urine varies from 1010 to 1025 and is due to the dissolved solids like urea chlorides sulphates and others The higher is **the specific gravity above 1024 thus indicating a good power of** ***concentrating the urine means that the kidneys are competent*** **Persistent low specific gravity of the urine and the failure of the kidneys to concentrate, notably above 1024 means incompetence of the organs, a** ***very important fact to remember*** *The specific* gravity rises in sweating in purgation after prolonged vomiting or under febrile conditions etc , in diabetes mellitus due to dissolved sugar and in nephritis due to exertion of albumin in it the specific gravity also rises **Low specific gravity** may mean cachetic conditions anaemia poor diet diabetes insipidus and most important incompetent kidneys in granular or contracted and other stages of the organs Hydronephrosis also may cause the specific gravity to be low

**Urea and other nitrogenous products**—These are derived from **endogenous and exogenous** sources It depends on the (a) state of renal function (b) fluid intake (c) amount *of portein* in diet (d) rate of catabolism of protein in the body and (e) perhaps on functional condition of the liver which forms urea from proteins During insufficiency of blood flow through the kidneys, in severe diarrhoea vomitting etc there appears alteration in the ratio between sodium chloride and urea in the blood the former diminishing (hypochloremia) and the latter increasing (azotemia) In nephritis a protein poor diet may show a lower excretion of urea in the urine and this should be carefully interpreted and need not be taken as failure of the excretory power of the kidneys While determining the percentage of output of urea in the urine it is imperative that the urea content of the blood should be determined simultaneously under identical conditions notably to come to some reasonable conclusion

**Urea,** the total quantity excreted on an average European diet of more protein than we take per day is about 18 to 20 grams may be increased in protein rich diet and may fall as low as 4 grams per day in protein poor diet or in starvation normally determined by the hypobromide method the percentage is about 2 per cent In renal diseases its excretion is diminished with concomitant retention in the blood The normal urea content of blood varies from 20 to 40 mgm per 100 c c. of blood the lower figure is in persons living on a protein poor diet The average hospital type of patient in Bengal showed 23 mgm of urea per 100 c c of blood as determined in a series of about twentyfive hospital normals

Uric acid —Normal blood contains 2 to 3 mgm of uric acid per 100 c c Its exogenous sources are articles of diet rich in nucleoproteins like liver kidneys brain sweetbread etc Only a fraction of the purin bodies appear as uric acid the bigger portion being destroyed by liver to be excreted as urea Leukocytosis or leukaemia or injection of big doses of liver extract for prolonged periods increases the uric acid content of blood or sodium urate in the urine The alkaloids of tea coffee or cocoa produce chiefly xanthin and hypoxanthin by oxidation through the liver the rest is excreted as uric acid In **renal failure and in gout there is an increase in the uric acid content of blood**

**Creatinin** content of normal blood is less than 2 5 mgm per 100 c c of blood It remains more or less constant on a carbohydrate diet and is the index of the endogenous nitrogen metabolism During muscular wasting its excretion is increased In serious uraemia it may rise even rarely to 30 mgm but 10 mgm may be common in uraemic patients In the nephritic subject the impairment of creatinin excretion approximately parallels that of urea excretion (Fishberg)

**Creatin** though abundantly present in the muscles is not normally present in the urine Other amino acids do not play much significant role in the causation uraemia

**Ammonia** —In normal blood the ammonia content is less than 0 1 mgm per 100 c c of blood and is not of much significance in ascertaining kidney function Normally it is excreted up to 1 gram per day in the urine Its increased output means acidaemia and not any incapacity of the liver to form urea In diabetes mellitus with ketosis etc its excretion is increased even up to 4 grams daily hence the ammonia coefficient of the urine is important not only in actual acidaemia but also in diminished alkali reserve of the blood

**Hippuric acid** is probably synthesised [illegible] kidneys by combination of benzoic acid with glycocoll [illegible] in the urine is increased on a green vegetable diet and is diminished in degeneration of the renal tubules

**Pigments of urine are nitrogenous** —Urochrome is the : colouring matter but though related to urobilin it has an inde dent origin from haemoglobin Urobilin is a reduction pro of bile pigment effected by intestinal bacteria and is normally excreted as such but as a colourless chromogen presence as a preformed urobilin means either septic infectio gall bladder and bile ducts or prolonged intestinal stasis putrefaction or intestinal obstruction or increased haemoly:

**Non nitrogenous constituents** —These are mainly the s **Chlorides** as opposed to sodium chloride normally is about mgm per 100 c c of urine whereas it is about 350 mgm 100 c c of blood The daily output as sodium chloride is abou to 12 grams per day in health but in exudative stage of pneu nia and in nephritis its output is diminished whereas excretio much increased in Addisons disease, when sodium chlo crally is effective in treatment The oedema of nephritis ne rosis and hypoalbuminaemia increases due to sodium retent and not chlorides

**Phosphates** —In health concentration of phosphate is mgm per 100 c c of blood and 150 mgm per 100 c c of ur There are two varieties (1) the acid phosphate of sodium a potassium which are not precipitated by neutralisation wherea (2) the earthy phosphates of calcium and magnesium ar deposited on neutralisation (See also phosphaturia)

**Sulphates** —The daily output of sulphate is about 1 5 to : gram of SO 4 in the urine Its concentration in the urine is 15 mgm per 100 c c and in blood 3 mgm per 100 c c The sourc of urinary sulphate is mainly from the oxidation of the sulfu from protein food A rise of total sulphate in ethereal combi nation excreted in the urine indicates probably a better proof o intestinal intoxication than indicanuria **Indican** or indoxyl sul phate of potash is present in 0 026 to 0 085 mgm per 100 c c of blood but in marked intestinal putrefaction this may rise up to 0 15 mgm per cent In renal insufficiency it may rise much higher Normally it should not be present in the urine of children but may be present in this secretion of sedentary elderly people showing intestinal putrefaction of proteins Its constant presence in the urine suggests that the subject is a candidate for old age **It is only detectable in fresh urine and tends to disappear on keeping the urine for some time**

**Diastase** content of normal urine is about 10 to 30 units it is less in impairment of renal function increased in pancreatic disease 50 units suggest pancreatic lesion 100 units making it rather certain and in severe cases of pancreatitis it may be as high as 300 to 500 units

# ABNORMALITIES OF URINARY SECRETION

**Anuria** is suppression as opposed to retention of urine

A **Causes, in the kidneys**—(1) Acute nephritis with intense congestion or at the terminal stages of nephritis or nephrosis (2) acute irritant poisoning of the kidneys such as by cantheridine turpentine carbolic acid hydrarg perchlor and others

B **In the ureters,** bilateral obstruction of the ureters by stones cancer glands enlarged uterus and others

C **Reflex.**—In operation on the trigone of the bladder or of the kidneys

D **Vasomotor** conditions like shock collapse irritation of centre also collapse in cholera black water fever heat fever and others

E **Hysterical** a rare condition in which fraud should always be eliminated

**Oliguria**—(1) **Pre renal** insufficient intake of fluid excess of sweating hard physical exercise in diarrhoea vomiting cholera and in acute fevers with high temperature

(2) **Renal causes** are the different types of kidney diseases.

**POLYURIA** **Symptomatic**—(1) **In nervousness** fright (2) Due to local irritation as in gonorrhoea enlarged prostate may occasionally be due to too much acidity of the urine or due to excess of sugar or ketone bodies as in diabetes mellitus It is more a frequency and the quantity may not be large on each occasion (3) **In increased intake of fluids.** (4) **Dilatation of the vessels of the kidneys** by caffeine group of diuretics hydraemia by increased blood volume (5) **Inability of the kidneys to concentrate** urine as in chronic nephritis (6) **Increase in molecular concentration** as in saline diuretics diabetes mellitus etc (7) **Diabetes insipidus** injury to the base of the brain in pituitary disturbances acting probably through vascular alteration Periodic polyuria may be found in *critical dieuresis of establishment* of the action of digitalis in heart failure and also in hydronephrosis

## ALBUMINURIA

**Albuminuria**— The predominant mechanism in the causation of albuminuria in renal disease is an increase in the permeablity of the kindney to blood protein which results from injury to the glomerular membrane and permits physical filtration of plasma proteins (Fishberg) The clinical significance is not always easy to ascertain

The cause of albuminuria may be A benign or physiolog and B organic

**BENIGN ALBUMINURIA,** or physiological or orthosta or functional albuminuria i e postural or cyclical

**Etiology** —The probable causes of this as suggested a (1) due to erect posture in persons of unstable nervous syste (2) Presence of focal infection (3) Under nutrition ( Constitutional inferiority like asthenic habit unstable sympatl tic system (5) Lordosis of the spine etc (6) Severe men strain and cold

No organic disease of the kidneys is found in these subjec **Age** Common between puberty and adolescence males a affected more commonly Protein up to 1 per cent may found in the urine after violent physical exercise (Collier—190 or in erect posture notably with lordosi Proteins of foo except the irritating action of albumin of raw eggs have i influence On recumbent posture this proteinuria is absen Early morning urine may contain proteins but if urine is passe or the bladder is evacuated of midnigh urine i e the samp formed during or immediately after erect posture or exercis proteins are invariably absent indicating that proteinuria pe sists for a few hours even after cessation of hard labour or erec posture

**On examination,** these young boys are found to be anaemic weedy and of a dull heavy appearance with a tendency to eas fainting The heart is irritable and the blood pressure fluctuate on change of posture

**Diagnosis,** should be made on prolonged careful observa tion The urine contains no casts except a few *hyaline ones* **passed by the healthy** and a few crystals of calcium oxalate The cardio vascular system and the blood pressure *remain* nor mal and without any oedema and the functional *test of* the kidneys and the blood biochemistry and the fundal findings are al normal

**Treatment** —This condition tends to clear up under *10 to 15* grains of calcium lactate or teaspoonful do es of soda bicarb thrice daily Tepid bath cold spong ng down the spine a general tonic with iron arsenic nux vomica and laxatives *or* when *overworked* rest in *bed* during *holidays may improve* matters and may gradually get cured

**Febrile Albuminuria** —High temperature may produce proteinuria by inducing cloudy swelling of the kidneys I tends to clear up with the cessation of the temperature

**Toxic Albuminuria** —Poisons acting for a period ju t short of permanent change belong to this group

*stive Albuminuria* may occur when the venous mpeded as in right sided heart failure There may heart condition hyaline casts and mostly plenty of Proteinuria also may be found after convulsions in nd other causes of fits In ascites pregnant uterus, tc pressing on the veins by congestion may cause it nuria of organic diseases —(1) All fomrs of nephritis rosis. (2) Residual or lingering proteinuria after which may occasionally persist life long (3) Amyloid the kidneys (4) Tumours and infarcts in infection idneys by tubercle bacilli coli pyelities tumours etc (5) *Ureteral causes like stone inflammations etc* der causes such as cystitis new growths stones is (7) Urethral causes like prostatitis

lbuminuria —Normally the ratio between albumin and n ordinary proteinuria is 6 to 1 but in this condition rtion is 1 to 1

## PROTEOSURIA *or* ALBUMOSURIA

nose strictly a proteose is excreted during autolysis such as in reabsorption of pneumonic exudate in low atrophy of liver and in involution of the uterus se are not of much clinical import

*Jones protein appears in the urine early in multiple* (multiple tumours) of the bones when only pain and precedes *the tumuors* It *is not a strict proteose* s a ring at the junction with strong hydrochloric acid to be precipitated at 40° to 55° C then again gets dis higher temperatures Usually they are precipitated by with ammonium sulphate but is not coagulated by ie precipitate on the filter paper if washed with wate ose gets dissolved and comes out through the filter To this clear filtrate addition of a few drops of strong hydroxide solution and a few drops of copper sulphate impart a *pink colour Bence Jones protein gives* a olour Occasionally Bence Jones protein may be ously precipitated imparting a *milky appearance to*

## CHYLURIA

des what has been discussed under chyluria of filarial *blockage of the thoracic* duct and the dilatation of the cs of the kidneys ureters the bladder etc by tumours uterus *may also* cause this symptom Lipaemia of mellitus growth of the kidney and fracture of long ay cause the urine *to* be *slightly milky* True fat i

differentiated by *ether being able to dissolve it* whereas pseudo chyluria is due to lecethin or compounds of globulin are insoluble in ether Also for details see chyluria under filaria

## PYURIA

Pus may come from urethra prostate bladder, and kidney Best test for pus is the microscope If it is in great amount addition of liquor potassii or caustic potash solution will give a *ropy mass Ozonic ether shaken with the urine will evolve ou* oxygen Tinct guaiacum gives a blue colour

## BACILLURIA OR BACTERURIA

*This consists of the presence of bacteria in the urine not* accompanied by local symptoms

**Etiology** —The organisms may gain access into the urin from the blood stream, during the process of excretion by th kidneys *from the intestines through the lymphatics* in connection with the kidneys or by some ascending infection from the urethra Generally excretion of organisms by the kidneys mean some degree of renal damage The commoner *organisms are* bacilli coli proteus typhosus and various paratyphoid group cocci like strepto staphylo gono and pneumo may also be found

**Clinical manifestations** —The history may be significant, in *bacilluria as a sequel of acute illnesses* such as typhoid fever pneumonia infective endocarditis or gonorrhoea etc In some cases of debility coli may be passed in the urine without much *significance*

**Treatment** will depend on the underlying cause

## HAEMATURIA

***Haematuria*** *is the passing of blood in the urine*

**Etiology —(1) Systemic or pre renal** Mainly in affection of the red blood cells or the capillary endothelium or in both e g purpura, scurvy other haemorrhagic *conditions* leukaemia haemophilia haemorrhagic fevers like haemorrhagic small pox may be in scarlet fever In the new born may be due to hypo prothrombinaemia haemorrhagica neonatorum

(2) ***Renal causes*** such as *nephritis* infarct tuberculosi growth calculi specially oxaluria and stones in the kidneys In acute pyelitis papilloma polycystic kidney congestion injury *pyelitis* etc

(3) **Acute irritants** like turpentine cantherides, carbolic acid and others and rarely hexamine

(4) ***Ureteral*** *such as calculi acute pyelitis tuberculosis* etc

(5) **Vesicular** causes such as villous papilloma calculi carcinoma tuberculosis varicose veins acute cystitis occasionally arteriosclerosis and where present bilharziosis

Causes in the prostate,—enlargecent and new growth
Traumatic may be anywhere in the whole course of the tract

;nosis —The colour may be pink or smoky according to int of blood It is pink or dark red when the quantity is large and smoky when the quantity is smaller It 1 is intimately mixed or smoky it is likely to be of renal Blood at the beginning of micturition is usually urethral lder conditions give rise to terminal bleeding In bleed i the bladder the washing of it by sterile water get ith blood Passage of clots are in favour of kidney, renal pelvic and upper urethral bleeding The patient e investigated from the standpoint of the above etiol tors for blood diseases and pre renal causes fevers etc rt blood pressure the non protein nitrogen content of e condition of arteries and the fundus oculi etc shoul ned for chronic kidney disease Also examination of e, its amount casts crystals cells organisms ova etc information respectively regarding nephritis oxaluria osis cystitis pyelitis bilharziasis etc Blood count tion of slides made of the urinary deposits W R of ystoscopy pyelography skiagraphy after uroselectan catheterisation etc will help In spite of all these ay be cases of haematuria which evade detection and if d with the onset of high blood pressure it may mean epistaxis or essential bleeding of the kidneys.

gnosis and Treatment —Both vary according to the cause ng In the case of removable ones the outlook is than in the case of conditions difficult to treat

## HAEMOGLOBINURIA

inition —It is the presence of haemoglobin or methaemo nd not red blood cells in the urine The urine gives tes nin

gy —(1) Chemicals such as potassium chlorate urotro ecially when given intravenously muscarine rarely

Infective as black water fever syphilis yellow fever

Transfusion of unmatched or incompatible blood netimes in pregnancy and puerperium
roxysmal —Sometime (1) exposure to cold (2) violent l exercise (3) occasionally haemolytic anaemia causing al haemoglobinuria (4) rarely paralytic haemoglobinuria e commonest cause in the tropics is malarial haemoglo or black water fever next common probably is oral use

of potassium chlorate nitrites arsenic or arsenuretted hydrogen from extensive burns carbon monoxide poisoning transfusion of incompatible blood have caused it

**Paroxysmal haemoglobinuria** commonly seen in Raynaud's disease and in yellow fever and sometimes in syphilis. These persons when warmed up after having got chilled or soaked in rains may show haemoglobinuria the W R of blood may be positive A haemolysin is suspected to be present in the blood of these persons which is activated by warmth (Donath Landsteiner reaction) Epidemic haemoglobinuria of the new born may be associated with cyanosis jaundice and nervous symptoms

**Clinical manifestations**—There may be associated chill, pain in the loins fever sometimes vomiting Paroxysmal haemoglobinuria may last for hours or days and may frequently recur Jaundice is common in these persons

**Diagnostically** the spectroscope may be useful in some obscure cases to ascertain exactly the presence of haemoglobin

**Treatment,** will naturally vary according to the cause In syphilitic cases of paroxysmal haemoglobinuria proper treatment may do good otherwise the prognosis is not so good If any oral medication is known to cause it should be stopped In cases of hypertension amylnitrite may cut it short Chills and getting soaked in rains should be avoided Before and after transfusion of blood the recipient should get plenty of alkalies C and K vitamin and others

## MELANURIA

True melanuria occurs in melanotic sarcoma The urine becoming black on standing or sometimes as is passed But pseudomelanuria may occur in —(1) Deep jaundice (2) severe haematuria or haemoglobinuria (3) alcaptanuria (4) haemato porphyrinuria (5) indicanuria of severe type after prolonged intestinal obstruction or in severe protein dyspepsia (6) after certain diet like black cherries, plumes after drugs like naphthalin carbolic acid creosote rarely salicylates and a few others

## ALCAPTONURIA

It is a rare more or less harmless and usually congenital life long passage of homogentisic acid an intermediate product of incompletely fissioned tyrosin As it reduces Fehling's solution diabetes mellitus may be suggested but the urine on standing or by the addition of a drop of caustic soda solution becomes black

**Ochronosis** (Virchow 1866) is a rare condition with blackening of the cartilage ligaments and sometime of the conjunctiva associated with arthritis

## PNEUMATURIA

Pneumaturia means passage of air in urine or during micturition Causes may be (1) introduction of air at mechanical irrigation of the bladder (2) Gas formation by aerobic organisms mostly in presence of sugar in the urine (3) Vesico enteric fistulae

The diagnosis is made by asking the patient to urinate under water or in bath The air sometime comes out with a sound

**Acetonuria**, has been fully discussed under diabetes mellitus and under acid base balance etc

## CRYSTALLINE DEPOSITS OF URINE

**Uric acid** of yellow colour due to the pigment and different varieties are found The two commoner varieties are the barrel and whetstone types They are generally found in highly acid urine with great percentage of uric acid and in want of mineral salts and in low pigmentation Clinically this condition is not of much significance

**Cystinuria** is a rare metabolic disorder of proteins which is more or less inborn It is an amino acid containing sulphur and forms a part of many proteins notably of hair It is deposited as hexagonal plates and may occasionally be the starting point of stones

**Tyrosin** forms sheaves of fine glistening crystals and is usually accompanied by **leucin** crystals appearing only when the urine is concentrated by evaporation It forms spheres with concentric rings They are generally found in the urine in cases of acute liver damage such as acute yellow atrophy and cirrhosis of the liver coming on suddenly

## OXALURIA

It consists of passage in the urine of envelop shaped crystals of calcium oxalate There might be an amorphous variety which may not produce much symptoms

**Etiology** —Oxaluria may result from endogenous sources but defective metabolism of food material rich in oxalates are the commoner causes (1) Ingested oxalate in rhuberb spinach strawberries auram (Kochu) cabbage raddish sauliflower' tomatoes beet root tea cocco jellies milk eggs (oal and kochu) etc which are rich in oxalates and calcium (2) In either achlorhydria causing fermentation of carbohydrate or hyperchlorhydria favouring absorption of oxalic acid both these factors appear to increase oxaluria (3) In certain conditions of neurasthenia with irritability lassitude neuralgias without much apparent cause In gastro intestinal troubles like (1) disease of the pancreas (Mayo Robson and Cammidge) (2) in certain per

sons almost constant oxaluria appears of defective metabolic origin and they regularly excrete calcium oxalate crystal Whether these are the cases of endogenous oxaluria it is difficult yet to say

**Clinical manifestations**—These envelop shaped crystals of calcium oxalate cause smarting on micturition by damaging the urinary tract probably by their sharp angles When in great amount in a small quantity of urine they produce signs and symptoms **indifferentiable from renal colic, a point not sufficiently stressed in text books in comparison with its frequency in the tropics** The tongue of the patient is usually flabby, he may show undue irritability of temper and complain of pain round the loins or even colic after hard work or strenuous physical exercise associated with much perspiration and insufficiency of fluid intake The urine may be thick and contain crystals and pus cells only detectable under the microscope Recently Black (B M J 1945) found out of 13 cases of oxaluria in a group of British soldiers 20 had symptoms of renal colic 15 haematuria 8 with epididymitis and cystitis He stresses the frequency of this condition in tropics which is quite uncommon in cold countries Pathologically he found an inflammation of the trigone of the bladder in most cases by the cystoscope

He considers its frequency in the tropics to be due to (1) climatic heat causing loss of body fluids hence the condition is commoner during the hot season (2) Inadequate fluid intake with oxalate from diet like strong tea tomatoes etc (3) Probably the sun in the tropics acting on the skin produces more D vitamin and consequent hypercalcaemia Vitamin B complex seemed to have little effect in improvement

**Diagnosis,** is only possible after the centrifuged deposits of a sample of urine have been seen under the microscope The characteristic crystals are diagnostic

**Treatment**—The articles of diet mentioned which are rich in calcium or oxalate might have to be taken in strict moderation As Magensium salts tend to make the crystals amorphous thus making the condition less injurious the following articles of diet like potatoes bread meat apples and peas containing magnesium or magnesium salts given orally may improve matters The routine use of milk or sulphate of magnesium or oxide or calcined magnesia in half to one teaspoonful doses twice or thrice or more frequently daily act by making the crystals amorphous thus asymptomatic and also by relieving the constipation

A powder like the following after each of the principal meals may do good Pancreatin—gr 10 potassium citrate—gr 20 magnesium oxide to make up to 1 dram

Bitter tonic before and dilute hydrochloric acid and pepsin after meals may be of some use All vitamins should be adc

quately represented in the diet and may have to be given separately of special use are vitamins A B and C

In cases of habitual oxaluria besides the above lines of treatment the patient should be made to take some magnesium salts daily to keep the crystals amorphous thus noninjurious and more or less symptomless

## PHOSPHATURIA

*Phosphates in the urine are* excreted as acid sodium or potassium and also as earthy phosphates of calcium and magnesium The salts of the former group are not precipitated on neutralisation whereas the latter may be precipitated as stellar crystals of calcium phosphate or as crystals of magnesium phosphate and are no proof of a real increase in actual output of phosphates it only **means reduction of acidity of the urine** The presence of ammonio magnesium phosphate crystals of coffin lid and knife rest shape mean ammoniacal fermentation of urine usually from **cystitis or as a result of coccic infection** Recurrent calculi are not uncommon under such condition and may be composed of calcio magnesium phosphate carbonates and sometime traces of oxalates and are found mostly in alkaline urine Most of the cases of deposition of phosphates is due to their diminished solubility in comparative less acidity or frank alkalinity of the urine It is due also to digestive disorders and may mean **dyspepsia of vegetable diet and has got nothing to do with the degeneration or otherwise of the nerves as is often supposed by doctors and patients**

**The complaints** —Some of the nervous patient passing turbid phosphatic urine often complain of discharge of semen (matter) through their urine They suggest this because the urine looks turbid in reality it means phosphaturia and the reaction of the urine is either neutral or alkaline

**Treatment** —(1) **Increase of acidity of urine** 15 to 20 grains either of acid sodium phosphate or ammonium chloride three or four times a day by rendering the neutral or alkaline urine acid make the apparent phosphates disappear by increased solubility

Dilute hydrochloric acid in 15 to 30 drop doses with glycerine pepsin up to 1 dram diluted with water before meals followed by *ammonium chloride* and a laxatives if the patient is constipated may be of use He should have a protein rich dietary

**Habits and physical exercise etc** —The patient should be asked to take regular physical exercise and should be assured that he is going to get allright In nervous subjects a change to a more bracing climate where improvement of digestion with

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him to empty the bladder as completely as he can in each occasion The urea content of each sample is also determined and the volume of each sample is measured The volume of urine per minute is calculated by dividing the total volume of each sample by sixty Blood is collected for determination of its urea content and the output per minute of urea calculated If the blood urea concentration is now determined and the value of B is thus obtained According to the value of V maximum or standard clearance is calculated from the following formula The maximum clearance result is called Cm and the value of standard clearance is Cs as the case may be is expressed as a percentage of the normal average and the figures are 75 c c and 54 c c respectively being taken as 100 per cent

**The formula** —Two formulae have been worked out depending on the volume of the urine excreted per minute When this is 2 c c or more the urea clearance is maximum and expressed as Cm and when it is less than 2 c.c the clearance is called standard Cs

**Formula for maximum clearance—**

$Cm = \frac{U}{B} \times V$ Normal average Cm —75 c c

$Cs = \frac{U}{B} \times \sqrt{V}$ Normal average Cs —54 c c

where U indicates concentration of urea in mg in urine

B indicates concentation of urea in mg in blood

V indicates volume of urine in c c per minute

By this test it has been demonstrated that urea clearance of 20 to 40 per cent of normal in some cases of nephritis may show normal blood urea content suggesting a good reserve power for the kidneys and thus proving that only blood urea estimation as a guide to kidney function is not always dependable When urea clearance is over 10 per cent generally uraemia does not set in but when the clearance is below 5 per cent uraemia is always present

(4) **Concentration and elimination test** —(a) Urea concentration test \ After a light meal overnight the patient takes 15 grams of urea dissolved in 100 c c of water on an empty stomach first thing in the morning after having completely evacuated the bladder The urine is collected at hourly intervals for three hours in separate bottles and each bottle marked These three hours he should preferably rest and refrain from any food and drink The concentration of urea in each sample of urine is determined Normally 2 per cent urea is excreted If the maximum concentration does not reach 1 5 per cent the kidneys are likely to be impaired in function definitely It may sometimes induce nausea and vomiting as urea is unpleasant to take In oedematous patients the test is likely to be falacious The quantity of urea should be half in children from 3 to 5 years of age

change of surroundings when coupled with suitable physical exercise and rest may be of definite service

**Diet**—The diet should consist of eggs meat and other proteins *which tend to make the urine acid* *Vegetables* and too much of carbohydrates by rendering the urine alkaline may make the dissolved phosphates apparent hence the importance of keeping the urine acid and thus make the apparent phosphates go into solution

Depression of spirits and mental lethargy should receive judicious encouragement and proper treatment by iron nux vomica and other tonics and adequacy of vitamins etc When the mental condition is too depressing and warrants stimulation amphetamine sulphate or benzidrine sulphate 1 tablet early in the morning may help by keeping the spirits of the patient high

## FUNCTIONAL TEST OF THE KIDNEYS

**Functional test of the kidneys**—The kidenys have enormous reserve powers specially when we consider that the total number of nephrons in a kidney is about two millions and that only one tenth of it acts at a time and also though the function is mainly excretory yet the regulation of the reaction osmotic equilibrium of blood tissues and also concentration of the urine because at its initiation the urine resembles blood fluids without the colloids **In impairment of renal function, fixity of specific gravity of the urine at near about 1010 (isothenuria means like blood—Volhard) is the rule**

(1) **Examination of the urine**—This has already been discussed (2) Examination of the blood For this purpose estimation of the **urea content** of the blood is of importance Normally it varies from 20 to 40 mgm per 100 c c of blood After middle age even 50 mgm per 100 c c may be within normal limits In moderate cases of impairment of kidney function it (urea) rises in blood and cerebrospinal fluid but the extra renal *causes of their increase (azotaemia) should have to* be excluded A rise above 200 mgm is serious. In chronic nephritis higher figures may mean termination of the life

(3) **Examination of blood and urine simultaneously**—It has been found out that the rate at which the kidneys can eliminate urea from blood over a given period of time bears a definite relation with urea concentration in the blood and the volume of the urine excreted during the same period This fact has been utilised as a test of efficiency of the renal function independent of diet and restriction of fluids

**Method**—The patient empties his bladder completely and is not allowed any food or drink for two hours The urine is collected at the end of each hour in separate containers by asking

Plasma globulin—1 8 to 2 1 gm per cent
Phosphorus (inorganic)—3 to 5 mg per cent
Phosphatase —
  Acid (serum 1 hour)—under 2 5 units
  Alkaline (serum half hour)—3 5 to 13 5 units
Potassium (plasmo-serum)—17 to 22
Sodium (serum)—325 to 350
Sugar (fasting)—80 to 100 to 120
Urea—20 to 40
Uric acid—2 to 4
Van den Bergh Bilirubin—0 4 to 1 5 units
Icteric index—1 to 6

## URINE

Total quantity per 24 hours—1 000 to 1 800 c c
Specific gravity—1 010 to 1 025
Reaction—pH 4 7 to 8
Average amounts of inorganic and organic solids in 1 000 c c of urine from adult on normal mixed diet —

I Inorganic constituents —
  Chlorides (as NaCl)—10 0 gm
  Phosphorus (as $P_2O_5$)—2 0 gm
  Sulphur (as $SO_3$)—2 0 gm
  Sodium (as $Na_2O$)—4 0 gm
  Potassium (as $K_2O$)—2 0 gm

II Organic constituents —
  Urea—30 0 gm
  Ammonia—0 6 gm
  Uric acid—0 6 gm
  Creatinine—1 5 gm
  Total nitrogen—14 0 gm
  17 ketosteroids—
    Male—9 9 to 15 mg per 24 hours
    Female—6 4 to 10 2 mg per 24 hours

# NEPHRITIS GROUP OF DISEASES (BRIGHT'S DISEASE)

**Introduction** —Under Richard Bright of Guy's Hospital was admitted an intemperate sailor named John King suffering from oedema albuminuria and scanty urine Autopsy showed oedema of the lungs pleural effusions an enlarged heart with acute pericarditis and a small granular contracted kidney In 1827 in a masterly communication on this disease with many case reports he showed that the diffuse kidney lesions partly inflammatory and partly degenerative and also to some extent vas

**(b) Water elimination test** —A normal person with con ent kidneys generally passes out a fixed quantity of water dru in about four hours time but in incompetent kidneys gener fail to excrete the ame in this period and usually take lor time

But more important is the power of concentration of urine above 1021 on a water poor diet not associated with : extra fluid to drink

**(c) Excretion pyelography** —Some dyes containing iod when injected intravenously such as uroselectan B pyelect etc are readily excreted by the kidneys and being opaque X rays are very well visualised This is more of surgical th of medical importance

Other dyes like phenolsulphonphthalein test and also ind carmine excretion test may be of use

**The relation between urinary concentration and the conte in blood per 100 c c is given below —**

| Substance | Concentration in urine mg per cent | In blood mg per cent | Concentration in blood in renal insufficienc |
|---|---|---|---|
| Urea | 2000 | 30 | Increa ed |
| Uric acid | 60 | 2 | Do |
| Creatinin | 75 | 2 | Do |
| Indican | 1 | 0 05 | Do |
| Phosphate | 150 | 3 | Do |
| Sulphate | 150 | 4 | Do |
| Potassium | 150 | 20 | Slightly increased |
| Chloride | 500 | 350 | May be increased |
| Sodium | 350 | 335 | Do |
| Calcium | 15 | 10 | May be decrea ed |

## NORMAL BIOCHEMICAL VALUES

(Figures are milligrams per 100 c c of blood unless men tioned )

Bicarbonate (alkali reserve)—53 to 77 vols per cent $CO_2$
Calcium (serum)—10 to 11
Chlorides (as NaCl) Whole blood—450 to 530
Plasma—560 to 620
Cholesterol—170 to 220 (Average Indian)
Plasma Proteins (total)—6 3 to 7 8 gm per cent
Plasma albumin—4 5 to 5 5 gm per cent

measles, diphtheria small pox occasionally from mumps typhus pneumonia chicken pox influenza meningitis etc Sometime also from bacillary dysentery malaria etc upper respiratory tract infections (2) Septic foci such as *tonsillitis otitis media* sinusitis sore throat dental sepsis subacute bacterial endocarditis etc (3) Skin conditions specially scabies erysipelas impetigo burns etc (4) Operations in the throat infected with *strepto cocci such as tonsillectomy* mastoid operation etc may rarely be followed by nephritis (5) Epidemic type In the war con ditions in trenches an epidemic form of nephritis was seen characterised by dyspnoea at onset and running a benign course In fatal cases inflammatory and thrombotic changes were met with in the lungs and in the spleen (6) Pregnancy and pur pura may also produce it

***Predisposing factors*** —Age —More common in children and adults before 30 years Males commoner than in females Exposure to cold damp moist conditions and alcohol probably act by lowering resistance of the kidneys After heavy pers piration and sudden chilling there may be a risk also

**Probable pathogenesis** —In over 80 per cent of the cases it is the streptococcal toxin and not the organisms which causes the *mischief* Only toxins are not always enough but an allergic state incidental to the process of immunization to the primary infections also plays an essential role (Fishberg) The interaction of the antigen with antibodies result in a substance which injures the kidney capillaries (Longcope)

**Pathology** —The kidneys are generally enlarged but may be normal in size also the capsule strips easily the surface is plain pale and gray showing tiny red small patches or dots On section the pyramids are deeply congested but the cortex is pale with small red or gray dots representing the swollen glomeruli The capillaries all over the system are affected and their endothe lium mostly Endocapillaritis of Fishberg

**Microscopical changes** —The most dominant feature is the injury to the capillary (*endocapillaritis*) showing proliferative change The outer epithelial covering of the vascular loops of the glomeruli increase markedly in size and multiply so as to fill in the spaces between the loop and the tuft Later the swollen epithelium may degenerate and be cast into the capsular space Of even greater importance is the swelling and prolifera tion of the vascular endothelium These cells show rapid mitosis and may grow several layers deep hence the loop is completely obstructed thus forming the characteristic "epithelial crescents" This obstruction is further increased by the formation of intracapillary hyaline material which eventually lead to complete hyalinisation of the entire glomerulus This proliferation and hyalinisation leads to complete occlusion of the loop which becomes bloodless so no blood flows through

cular in character affecting various anatomical constituents of the kidneys There was impaired renal function with changes in several other organs as demonstrated in autopsy results mentioned above From that time the kidney diseases inflammatory degenerative and partly vascular are named after that pioneer master mind

**Classification of kidney diseases**—The difficulty in classification is naturally great because functional structural and clinical classification do not tally with each other An effort has been made here to classify kidney diseases based on the principles of Volhard and Fahr slightly modified from that of Fishberg and will be followed in the following pages of this text

I *Inflammatory*, **Nephritis**—
- A **Glomerulonephritis (Diffuse)**—
  - (1) Acute or first stage of kidney disease of Volhard and Fahr
  - (2) Chronic (a) with oedema also called second stage or sub acute or wet stage or early chronic stage (b) without oedema or third stage or secondary contracted kidney or azotaemic nephritis or small white kidney
- B **Focal nephritis**
- C **Acute interstitial nephritis**
- D **Embolic nephritis** (multiple glomerular embolisation)

II **Degenerative or nephrosis**—
- A **Larval** (Toxins of fever etc )
- B **Necrotising** (Syphilis Mercury perchloride Acute Cholera etc )
- C **Chronic**
- D **Amyloid**

III **Vascular**—
- A **Arteriolosclerotic or Essential hypertension or Hyperpietic kidney**—
  - (1) **Benign and (2) Malignant hypertensive phases**
- B **Senile Arteriosclerotic kidney**—(No rise in blood pressure )

## ACUTE NEPHRITIS

**(Diffuse Glomerulo Tubular Nephritis )**

**Synonym**—This is the first stage of kidney disease described by Volhard and Fahr

**Definition**—It is an acute diffuse glomerulonephritis of haematogenous origin

**Etiology**—(1) Acute infections one of the commonest in cold countries is scarlet fever generally in the third week

assume a propped up position may rarely be present. The oedematous areas have a peculiar stiff feel and generally pit on pressure. The fever might have been up to 102 to 103°F initially usually comes down to normal in about 10 days in uncomplicated cases.

**Cardiovascular system** —The pulse rate as a rule increases. The blood pressure rises for a fortnight or three weeks and the systolic figure may even reach up to 180 to 200 mm of mercury in an adult. Though the heart is not actually enlarged the apical sounds may be feebler, apex beat forcible with generally an accentuated aortic second sound. Lungs may show scattered rhonchi and some basal rales.

**Retina** —Generally there are no retinal changes at the earlier stages but sometime notably in hypertensive subjects there may be signs of neuro-retinopathy, the arteries look narrowed, the veins dialated with oedema of the disc and haemorrhages may be with wooly retinitis.

**Urinary findings** —The urine is much diminished and there might be even anuria initially which increases up to 10 or more ounces gradually. The specific gravity generally varies from 1020 to 1035 due partly to its albumin content. The colour may be dark or smoky due to blood or urates. The protein content usually varies from 0.2 to 0.4 per cent but may rarely reach up to 2 per cent even almost solidifying on boiling; the amount and proportion of albumin need not necessarily be parallel with the severity of the disease.

**Microscopically red blood cells, better red blood casts characteristic of the acute inflammation,** but epithelial, hyaline casts, renal epithelia, red and white cells are found in the centrifused deposit. The urine is usually sterile on culture. The chloride content is usually low.

**Blood Biochemistry** —There is retention of urea and non protein nitrogen. Water elimination test also shows low value. Other constituent of blood are within normal limits. Sedimentation rate of the erythrocytes is raised in acute and active phase due to probably to increased fibrinogen.

**Course** —Acute nephritis is a self limited disease clearing up in a few weeks when the cause is removable and under proper treatment. The signs of improvement are increased output, lesser albumin and casts and erythrocyte in the urine, the blood pressure falls to normal. The oedema may persist for weeks or may pass into chronicity.

**Complications** —(1) **Renal failure** may be early with anuria and convulsions, coma etc. *But uraemic manifestations or* hypertensive encephalopathy may complicate the picture. (2) **Oedema**. The oedema may extend causing oedema lung or larynx or hydrothorax, hydropericardium etc. (3) **Serious**

these glomeruli This glomerular ischaemia probably accounts for the hypertension accompanying the acute stage of nephritis

The **tubules** undergo cloudy swelling The **interestitial tissue and the arteries** are practically nomal at the earlier stage later slight oedema and localised cellular infiltration result ***The changes are more proliferative than exudative*** *There are varying amounts of exudate into the capsular space consisting* of albuminous material serum fibrin, leukocytes and red blood cells which are swept down by the flow of the urine when secretory function is established the **erythrocytes** and the **erythrocytic casts indicating the acute nature of the mischief**

**Oedema,**—in the acute stage is probably due to injury of the capillary endothelium **The protein content of this fluid being about 1 per cent in contrast to 0 1 per cent in nephrotic and subsequent oedema** In very severe cases there may develop in later stages inflammatory and necrotising lesions of the **vasa afferentia"**

***Clinical manifestations*** —*Onset may be acute* or insidious specially in children Cases following exposure to cold damp *drenching associated with infections any where as detailed under* etiology may be a common history The onset may be (1) ***latent*** only routine examination of the urine after *an acute* infection hitting the diagnosis (2) **Oedema** noted round the eyelids by friends or relations or less commonly in the *feet* and genitalia may draw the attention (3) **Urinary symptoms** like oliguria with blood in it pain round the loins and frequency of micturition may be suggestive

(4) **Symptoms of acute infections** like high fever aches and pains sore throat chills etc or vomiting specially in children may draw the attention (5) **Cerebral symptoms** like headache vomiting convulsions transient palsies all manifestations occasionally of hypertensive encephalopathy may suggest the diagnosis (6) **Insidious commoner in children** with weakness pallor loss of appetite thirst with slight oedema or not only to be diagnosed by a careful examination of the urine

In a few there may be common general symptoms or combinations such as *slight fever pain* in the loins oliguria oedema etc But text book like picture may not be always *common*

**On examination** —The patient looks slightly puffy round *the eyelids or definitely oedematous round the* face and the eyes specially in the morning on rising from bed The site of *the collection of fluid depends usually on the posture* also a is seen in feet in ambulant persons and also in the scrotum or *loins or in the abdominal walls thighs etc when in bed* In some advanced cases variable degree generally **very** slight *hydrothorax hydropericardium ascites etc causing* him to

under cold and local chilling of the kidneys due to getting soake in rains etc

**Curative** —(1) Rest and warmth Absolute bed rest an avoidance of chill cold etc and a flannel or any warm suitabl binder in the lower abdomen to keep the parts warm appea useful The period of bed rest should be extended till all externa manifestations and the urinary findings specially albumin an casts have cleared up, though may be through months

**Food and drink** —During the first week and during th acuter phases the diet should be that **which makes as little cal as possible on the excretory function of the kidneys,** thus ensur ing rest and minimizing the excretary strain on the organs Sodium ions and water are poorly excreted hence they shoul be given limited amount of a few ounces more or less equiva lent to the amount of urine passed to up to 2 pints as the condi tion improves Milk contains proteins hence should be avoide during the acute stage

**First three days** —About eight ounces of glucose or sugar o sugarcandy in half to one pint of water and a little lemon juic o orange juice may be allowed in three to four ounces ever three to four hourly With it 2 ounces of fruit juice should be added

**Fourth to tenth days** —As the urinary output increase barley water or rice gruel fruit juice lactose cooked fruits etc *may be given Those who have good appetite might take mil with rice sugared* may be with a ripe banana Biscuits toast jelly jam etc may be given in moderation But lesser the fluid and common salt in the diet the better is likely to be the effect

**After a fortnight** —As the urinary output increases and haematuria improves more carbohydrates like boiled rice with milk sugar and ripe banana mashed together honey potatoes oft rice bread and buttter cream cooked vegetables with as little alt as possible and milk up to 1 to 2 pints may be allowed Sweets like sandesh etc may be given in moderation

**But according to Fishberg** at the end of a week sufficient proteins say 60 grams daily may be given in the form of milk eggs bread chicken etc If there is nitrogen retention it may be advisable to give a low protein diet for a much longer period As the patient improves the diet may be made more liberal Salts and water may be restricted for sometime All meat extracts gravy rich spicy food coffee alcohol becon ham cheese pickles and excess of salts should be avoided or taken in strict moderation

N B —In actual practice one has found that acute cases of nephritis who in our country are habitually underfed with a consequent low colloidal content specially albumin content of

*infections* caused by secondary invaders with the involvement of peri or endocardium pleurisy peritonitis are easily grafted on a system with lowered resistence (4) **Chronicity of recurrence** *may follow*

**Diagnosis** —Oliguria albuminuria, oedema haematuria cylindruria (presence of casts), all or some of them with the type *of onset and physical findings* blood *biochemistry cardiovascu*lar and retinal changes when present may make the diagnosis easy but in children and also in the adults with insidious onsets *the diagnosis may be difficult but the above routine investigation* may help in the solution of diagnosis of the underlying nephritis

**Differential diagnosis —Acute exacerbation on chronic neph*ritis is suggested by the history of a previous attack* persisting hypertension cardiac hypertrophy, with sometimes sclerosed vascular changes in the periphery and retina fatty and granular casts *in the urine* persistent *azotaemia with diminished* urea in the urine all are helpful

**Focal nephritis** shows neither oedema nor hypertension nor hypertrophy of the heart not retention of nitrogenous metabolites

**Infarcts** usually do not cause so much oliguria nor casts nor oedema may be seen but only manifest pain in the loin with the haematuria In contracted kidney there will be abundant urine of low specific gravity and other changes described under the first head of differential diagnosis viz acute exacerbation on chronic nephritis

**New growths** cause *profuse haemorrhage at the early stages* and there are no typical casts nor oliguria nor oedema etc **Pyelitis** may cause haemorrhage and is usually febrile with pain *in the loins chill sweating leukocytosis* pallor, dysuria pyuria and the culture of the catheter specimen of urine giving positive results and other

**Prognosis** —There may be periods of long latency except albuminuria Some cases may die within a few months others may live for years But the following are *generally of serious* significance

(1) Persistent high blood pressure specially when near or *above 200 mm of mercury systolic* (2 *signs of cardiac failure* (3) high blood urea content notably when verified by urea clearance test (4) hypertensive encephalopathy or neuro-retinopathy Also the prognosis under chronic nephritis should be consulted

**Treatment Preventive** —Fishing out and eradication of the septic *foci* such as removal of septic tonsils but not *during* the acute phase of nephritis prompt cure of skin diseases avoidance of chill alcohol and other causative and contributory factor are *of importance In scarlet fevel fortunately rare* in India alkalies and antitoxin are said to do much good Relapses are common

under cold and local chilling of the kidneys due to getting soaked in rains etc

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**N B** —In actual practice one has found that acute cases of nephritis who in our country are habitually underfed with a consequent low colloidal content specially albumin content of

blood which kept on a protein poor diet for a prolonged period quickly pass to the oedematous stage due to quicker development of hypoproteinaemia and generally take a longer course of subsequent high protein diet or even plasma transfusions to render them oedema free Here comes the importance of a judicious dietary with adequacy of proteins commensurate with functional capacity of the kidneys

**Symptomatic** —

**Oedema** —**Purgatives** —Watery evacuation should be ensured by saturated solution of mag sulph half to one ounce in the *morning* Calomel and pulv *jalapco should preferably be avoid*ed at the early acute stage because of their slight irritant action on the kidney Weak patients should be carefully purged to avoid any weakness of the heart and excessive loss of sodium ions from blood is weakening also

**Excretion through the skin** —Warm sponging hot packs, hot air or electric bath used to be tried previously but due to their debilitating after effect they have been more or less given up Injection of pilocarpine nitrate is more or less risky because it might induce oedema lung Hot applications, counter irritants dry cupping, over the loins specially diathermy is said to have *done much good in a few cases*

**Diuretics** —Irritant diuretics are unsuitable at the acute stage *About 20* grains each of potassium citrate *and acetate* liquor ammon acetate 1 dram acid potassium tartrate 20 grains syrup 1 dram water up to an ounce are u*seful during* the acute stage

**Convulsions, etc** —Purgatives specially mag sulph and 25 per cent solution as retention enema of about 4 ounces concentrated glucose and hypertonic saline both due to their *increased* osmotic action are likely to be effective by reducing cerebral oedema

The individual symptoms like heart failure by strophanthin and digitalis pulmonary oedema by venesection and injection of atropine sulphate etc may do good Surgical treatment like decapsulation of the kidneys in continued and complete anuria is said to do good But the strain and risks of an operation appear too great to the modern workers Anaemia should be treated *in* the usual lines by iron arsenic nux vomica and mild laxatives etc

**In febrile cases** notably with septic foci, penicillin in suitable doses and in proper duration usually for a w*eek to ten days* appear to have done some good in a few of cases of acute nephritis under my care

## CHRONIC NEPHRITIS

**Chronic nephritis** —While many patients suffering from acute nephritis may recover completely there are others who due to the presence of some subacute or chronic source of infection like sore throat chronic tonsillitis sinusitis etc pass on to the chronic stage of nephritis In elderly people acute glomerulonephritis is likely to run a chronic subsequent course. In the presence of these sources of chronic sepsis as Emerson has said the patient does not suffer from one attack of nephritis but from one thousand and one as these mild exacerbations are shown by the increase in oedema oliguria rise of blood pressure etc

Difficulty in classification of chronic nephritis is great not only because there are various combinations of changes in structural and functional pathology the autopsy findings of the kidneys varying with the period elapsed between acute nephritis and death but also on the nature virulence chronicity of the infection and the type of resistance and repair that was possible *for the tissues of the host to be put forth* In short it may be said that from a few months to three to four years of the acute infection the kidneys are frequently of the (1) large **white** type described by Wilks (1853) later on as replacement fibrosis progresses it passes on to the stage of the **secondary contracted kidney or small white kidney** in contrast with the **primary contracted or red granular kidney originating primary from the vascular lesions (arteriolosclerosis) to be described later on** Though *many cases pass through the subacute stage from the* acute one yet there are some cases who instead of passing through this intermediary phase pass straight to the chronic stage hence in our classification we have divided chronic stage into two phases (1) the oedematous or large white kidney so called subacute stage and (2) the chronic small white contracted kidney

## EARLY CHRONIC NEPHRITIS

### LARGE WHITE KIDNEY STAGE OR SUBACUTE OR THE SECOND STAGE OF NEPHRITIS

**(described by Volhard and Fahr Chronic parenchymatous nephritis of old writers )**

**Pathology** —*Macroscopically the kidneys are enlarged may* be double their normal weight and resemble the organs of chronic nephrosis Soft in consistency the capsule strips easily without damage *to the kidney substance* The surface is pale and is of a yellowish or grayish white colour In congestion the colour may be brownish and small haemorrhages may be seen On section the parenchyma swells above the edge of the capsule At

this stage there is mainly inflammatory lesions in the glomeruli with secondary degenerative changes in the tubules and also in the glomeruli

**Microscopically** the cortex broadens and the markings are obscured There may be deposition of fat and lipoids in the cortex Some of the glomeruli are enlarged The convoluted tubules are mainly affected showing cloudy swellings fatty degeneration and desquamation of the lining cells blocking the tubules *But some of the glomeruli and tubules recover with good blood supply* There may be swelling of the glomeruli also Oedema and proliferation of the interstitial structures are common The above microscopic and macroscopic picture is more or less characteristic of the large white kidney This corresponds generally to that stage of glomerulo nephritis in which there is inflammation of the glomeruli with secondary degenerative changes in both glomeruli and tubules

**Oedema,** though starts with nephritis the subsequent developments are extra renal (1) From continued *loss of albumin* from the system through the kidneys the normal ratio of albumin *to globulin consisting of 2 to 1 is altered* and as normally albumin maintains the endosmosis inside the blood vessels in lowered albumin content of blood there is improper nourishment of the capillary endothelium due to the poor character of the albumin depleted blood hence there is (2) hyper permeability of the endothelium of the capillary allowing fluids out into the tissues because metabolites oxidation products like carbon dioxide lactic acid etc cause acid intoxication and as cannot be *drawn* inside the blood vessels to be excreted by the kidneys due to *lack of endosmosis inside the blood vessels for hypoalbuminaemia* the tissue metabolites in order to be diluted require water and fluids but fluids cannot be retained without sodium ions hence these sodium ions are retained with it the fluids causing a tissue hydraemia (3) Chole terol increases in the system there is also hypothyroidism with lowered metabolism hence the lipoid poor cells tend to imbibe more water Once oed ma has started pressure is exerted on the *lymphatic vessels and nerves* hence the feeling of stretching and tension

This oedema *may show increase or decrease* but the common causes are (1) nephritis (2) nephrosis (3) in secondary heart failure from primary kidney conditions

**Clinical manifestations**—In our country people living on a habitually protein poor diet pass on more quickly to this oedematous stage than is generally mentioned in text books *Oedema* anasarca and anaemia of months or even years may dominate *the clinical picture making the suggestion of Wilk s* large white kidney with a large white man true yet a great variety of dissimilar clinical pictures may be presenetd by this disease

From the acute stage after a variable period of a few months to one to three years may be, with an apparent quiescent phase or simultaneously may pass to the oedematous condition when he looks pale anaemic with digestive disturbances and langour, etc There may be hydrothorax hydropericardium ascites and general anasarca

Urine —The quantity is about 10 to 20 ounces or less the specific gravity is near about 1020 to 10₀0 or higher and the protein content is near about 0 ₀ to 1 per cent or much more because generally at this stage the maximum amount of albumin is passed through not only the glomerular membranes but also through the degenerated tubules There are generally fatty epithelial and granular casts lipoid casts may also be encountered

*Blood biochemistry —There is diminished blood protein and* inversion of albumin and globulin ratio from normal 2 to 1 to 1 to 2 thus explaining the principal cause of **oedema** Blood cholesterol is increased and basal metabolism lowered and the blood pressure and the urea content of blood may be slightly raised but more commonly are normal The oedema fluid here contains 0 1 per cent protein in contra distinction with per cent protein in the acute stage due probably to endocapillaritis of acute nephritis

**Course** —(1) The condition may get progressively worse through repeated exacerbations as is shown by haematuria and increased oliguria leading even to renal failure (2) The oedema may persist and the anaemia and lowered resistance may invite acute infections like pneumonia broncho pneumonia or sepsis closing the scene (3) Not uncommonly this nephrotic type of chronic glomerulonephritis after years of albuminuria may terminate to hypertension and impaired renal function terminating in death Anatomatically passing from the acute to the large white stage thence to the small white contracted kidney with failure or incompetence of kidney function

**Complications,** are more or less the same as in the acute stage

**Diagnosis** —The oedema anaemia and anasarca and the typical history with oliguria albuminuria *and the casts in the* urine make the diagnosis complete Other details may be verified from the blood biochemistry kidney functional test etc

**Differential diagnosis —Heart failure oedema** —There may be history of rheumatic faver or other suggestive cause of heart disease and *the oedema* as a rule starts from the inferior extremities the patient may complain of dyspnoea cyanosis etc On examination the neck veins are prominent the apex is generally outside the normal limits tender and enlarged liver ascites crepitations at thte base of lung oliguria albuminuria *urates in urine* absence of casts, etc help in differentiation

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15 grams. For vegetarians milk casein and powdered lentils may take the place of egg etc

**Lunch** —Meat boiled or cooked one eighth of a seer or four ounces rice (dry) one ounce or half a chattak Milk eight ounces channa (milk casein) two ounces dal or lentils (dry) two ounces, vegetables four ounces are suitable and such a diet contains about 30 **grams of protein**

**Tea (afternoon)** —Milk eight ounces and some suitable fruits or milk preparations like sandesh and milk pudding etc contain about 8 **grams of protein**

**Dinner** —Fish one eighth of a seer or 4 ounces meat of the same weight as fish lentils two ounces rice (dry) one ounce milk eight ounces vegetables four ounces and such a diet contain about 50 grams of protein

In the day s diet prescribed above there is about 130 **grams of protein in all** Those who do not take fish and meat should make up the deficiency by replacing them by channa or cheese or dal or lentils etc And the daily ration of proteins should be about 100 grams at least In our indigenous system of Kavirajı the use of liberal amounts of milk and milk products constitute the main article and a good source of first class protein

As the albuminuria may continue for months in cases of this sort the necessity of replacing the lost protein is obvious From experience I have not seen any harm and not uncommonly decided benefit from an ample protein diet in suitable types of these cases Very recently I have treated some of these intract able cases of oedematous nephritis by repeated transfusions of plasma with gratifying results But this treatment need be guided by frequent estimation of nonprotein nitrogen content of the patients blood

According to Fishberg many cases of so called nephrosis cured by high protein diet were cases of nephrotic type of *glomerulonephritis* *For the details of* some symptomic treat ment of oedema the treatment of this ondition detailed under cute nephritis should be seen

**Fluid and water** —Fluids to the extent of 1 to 2 pints may be adequate but when on a high protein diet may require more fluids part of which may be given in the form of distill d water containing no sodium ions which increases the oedema notably at the initial stages of treatment but once the hypoalbu minaemia is replaced tap water and even common salt may be given

**Salt** —In both oedema and hypertension common salt is injurious because both these conditions get worse under it but too much restrictions may cause undue weakness and hence not more han four to seven grams of salt per day is allowed The kitchen preparation should satisfy the patient and no additional

**Anaemic dropsy,** in our country there are numerous causes of oedema under this group such as chronic diarrhoea or dysentery hookworm infection improper poor diet famine and many others Though the oedema starts generally from the inferior extremities the ultimate cause is hypoproteinaemia He is easily tired and may show dyspnoea on exertion The mucous membranes are pale In the absence of heart failure and kidney disease a thorough examination of the blood picture showing anaemia and estimation of colloids of blood showing hypoproteinaemia or more correctly speaking hypo albuminaemia will clear up the diagnosis (See hypoalbuminaemic oedema)

**Amyloid kidney**—The original cause like suppuration osteomyelitis or tuberculosis of bones or joints bronchiectasis might have been there and the absence of hypertension heart and retinal changes and the absence of casts or blood in the urine and without much impairment of renal function if also associated with amyloid diarrhoea the difficulties should not be great For the differentiation from **epidemic dropsy and wet type of beriberi** the respective paragraphs under those diseases should be consulted

**Prognosis**—For the details of this see prognosis of contracted kidney

**Treatment**—If the patient cannot cocentrate the urine well and if other functional efficiency tests and the estimation of blood urea are poor then these should be our guides as to the line of management But in the oedematous stage as we generally find no rtention of nitrogenous content in the system the broad principles are to **withhold salt and water and to give high protein diet** mostly from milk proteins till the hypoalbuminaemia the main cause of oedema is improved and altered to normal ratio with increase of blood albumin

**Preventive**—These measures are more or less the same as in cases of acute nephritis During the acute exacerbation or when the oedema is great or in uraemia the patient should be in bed and kept warm

**Food and drink**—As the oedema is mainly due to hopoproteinaemia and as the blood nonprotein nitrogen content is normal or low a **high protein diet** with restricted salt and water is the main line of therapy A sample diet like the following may be given after being satisfied that there is no question of any azotaemia

**Breakfast**—One egg milk half a seer or a pound bread two ounces buttered tea some fruits like orange apple and local indigenous fruits like mangoes lichies custard apples, papayas in their absence a few tomatos about four ounces in weight may be given The total protein in this meal is **about**

: capillary endothelium undergoes hyperplasia and sometime
:e is hyaline degenerat on and hyperplasia of the media The
n changes appear in the blood vessels which later show (1)
arteritis obliterans (2) muscular hypertrophy (3) arteriolo-
rosis (4) arteriolar necrosis all tending to cause poor blood
ply with consequent degeneration and fibrosis leading ulti
ely to renal failure and may be with a rise of blood pressure
Clinical manifestations —The patient may present a grea
iety of dissimilar blending of symptoms Complaints may be
to (1) anaemia such as pallor weakness indigestion and
a flatulence dyspeptic difficulties or (2) uraemic manifesta
s commonly with involvement of either the respiratory system
dyspnoea etc or ga tro-inte tinal like vomiting diarrhoea
igent on or ulcer of colon and so on or attacks of hyperten
: encephalopathy like headache vomiting mental confusion
aoplegia hemiplegia etc or neuro-retinopathy such as sudden
; or lack of acuity of vision haemorrhage into the retina or
ema of the discs etc All these cerebral changes are com
ner the higher is the blood pressure (3) He may also ex
ience and complain of hypertensive difficulties like pain in
back and of the nape of the neck specially in the evening
pitation sudden epistaxis breathlessness on slight exertion
yuria apoplexy cardiac asthma etc (4) Again the com
ints may be of the superimposed terminal infection specially
the serous sacs like pericarditis pleurisy peritonitis pneumo-
. and others grafted on a system of lowered resistance due to
onic nephritis Children suffering from it may fail to grow in
ilth and structure and are called **renal dwarfs** But the ulti
te diagnosis may sometime be made by the routine examina
n of the urine may be for insurance purposes and by the
sed blood pre sure and hypertrophy of the heart retinoscopy
sed nonprotein nitrogen content of blood and terminating ulti
tely in renal failure

Fishberg in his book nephritis and hypertension has
cribed the following clinical types where no distinction is made
tween the large white stage from the contracted kidney as
cribed here in this text (1) **Severe or subacute type,** whi
ly pa s to uraemia and death within a few months of acute
et and this acuity not abating at all (2) **Nephrotic type,**
cribed *under the large white kidney stage described already*
) **Hypertensive type** where differentiation from hyperpiesia s
ly po sible by examining the urine he retina and renal effi
ncy test etc (4) **Recurrent type,** in whom the haematuria
guria oedema cylindruria recur and leading to cardio vas-
lar and renal changes (5) **Latent type** with only residual
buminuria bearing the only evidence of the acute attack (hei
ng mit defekt) or healing with defect of Germans (6)

salt is to be granted If the diet tastes too insipid lemon juice or potassium chloride may be added

When the patient is improved and might have been doing his work he should avoid excess of salt water and protein. He should also avoid getting corpulent

Other diuretics which do not irritate the kidney may be given judiciously Mercurial diuretics are more or less contra indicated specially in presence of even traces of renal damage The anaemia should receive proper treatment by iron purgatives etc All septic foci should be removed

**General management**—Patients with oedema should always be in bed and when recovery is definite then only he may be up and about Moderate physical exercise at this stage is of use but strenuous exercises chilling and irregular life should always be avoided as they are likely not only to delay recovery but also may help in the flaring up of the subsiding trouble

## CHRONIC NEPHRITIS

**Synonym.**—Secondary contracted kidney small white kidney chronic nephritis or third stage of kidney disease etc

**Pathology**—Gradually the specific parenchymatous renal elements are variably destroyed with replacement fibrosis the kidneys shrink with resultant patchy contraction having an uneven surface the time taken for this to take place varies according to the nature severity frequency of the exacerbation and the resistance of the tissues of the patient. It is called secondary contracted kidney because it evolves from a previously enlarged white organ These organs are small hard whitish and unevenly granular the thickened capsule is adherent and strips with difficulty Their weight may be so reduced as both together may weigh 75 grams On section there is increased resistance to the knife The markings are obliterated the cortex much narrowed large portions of cortical substance containing glomeruli and tubules being replaced by fibrous tissue are interspaced with lipoid plaques as a result of degeneration of proximal groups of convoluted tubules The pelvic fat is increased and the vessels are prominent

**Microscopically** most of the glomeruli at this stage have undergone hyaline degeneration to be replaced by fibrous tissue and these are the depressed areas on the surface of the organ When completely degenerated and thus made incompetent there is much shrinkage of the surface Some proliferation of the glomerular capsular epithelium at places may lead to crescent formation though this is more characteristic of the earlier stages Sometimes the tubules tend to regenerate but become contorted by pressure of fibrous tissue The fibrous tissue forms from interstitial structures as well as from the glomerular capsules.

**Diagnosis.**—The previous history of acute nephritis much greater quantity of urine than in normal with traces of albumin typical granular casts, retinal changes azotaemia hypertension with hypertrophy of the heart and others all help

Differentiation has got to be made from conditions which cause an increased output of urine such as diabetes mellitus and diabetes insipidous the former is diagnosed by the presence of sugar in the urine and the latter showing a large quantity of urine with persistent low specific gravity and responding to injection of pituitrin etc

**Prognosis,** may be considered from (1) point of view of recovery (2) Expectation of the length of life

(1) Acute attacks may recover completely whereas chronic cases may last long or recover Within the first year of acute disease even in serious form complete recovery is possible In our country the oedematous type of nephritis follows the acute infection sometimes very quickly because of the protein poor diet and consequent hypoalbuminaemia With onset of hypertension even if the duration is shorter recovery is improbable but in oedema without hypertension recovery is possible Hypertensive cases are generally progressive and usually fare badly specially after one year The spcific gravity of the first morning urine if is of persistently lower than 1022 or still lower the progress is likely to be rapidly downwards In women with chronic nephritis pregnancy is a risk Intercurrent infection sepsis etc. may make the condition worse

(2) **The higher the blood pressure in a case the worse is the prognosis** A persistent diastolic pressure above 120 mm of mercury with kidney changes may make the life span limited even for one to two years Convulsions are of more serious import in chronic cases than in acute ones. Retention of urea or nonprotein nitrogen on a low protein diet is worse In the presence of cardio circulatory hypertrophy there may be symptoms of heart failure

Frank signs of uraemia may it be (i) cerebral with or without hypertensive encephalopathy or neuroretinopathy etc or manifesting some of the cerebral symptoms mentioned already or (ii) gastro intestinal manifestations or (iii) respiratory involvement or intercurrent diseases may help to terminate the scene sooner or later

**Principles of management** —(1) Effort for improvement of excretion by the kidneys (2) Promotion of extra renal excretion such as to utilize the intestines as excretory organs through saline purgatives (3) By sweating but may prove very weakening (4) Venesection (5) Symptomatic (a) Nervous manifestations like headache insomnia restlessness (b) occa

**Malignant *phase,*** in which persistent diastolic pressure above 120 mm of mercury papilloedema and gradual loss of vision and symptoms of hypertensive encephalopathy the picture resembling one of malignant hypertension described subsequently under arteriolosclerotic kidney ***Physical examination,*** the subject as a rule a young or a young adult person oedema free with few or some of the above complaints The general systemic manifestations vary according to the duration acuteness of the nephritis In well established cases one expects —in the **cardio vascular** system the heart is likely to show some hypertrophy, may be with an apex more down than out booming sustained first sound and accentuated aortic second sound **The blood pressure** usually is higher and may vary between 120 to 150 diastolic and with a systolic variation between 200 to 250 mm or higher The fluctuations to the lower figures may not be as frequent as in benign phase of essential hypertension When the condition is of long standing cardiac asthma pulmonary oedema gallop rhythm and lowered blood pressure with diminished urinary output may mean a failing heart

Because probably of the younger age of the patient cerebral haemorrhage is not so common as in malignant phase of essential hypertension where the patient is likely to be rather partly an elderly subject But angiospastic phenomena like dead fingers or toes localised numbness tingling loss of power may not be infrequent

**Retinal changes**—Chronic nephritis may first be diagnosed by the ophthalmologist Out of 51 cases of chronic nephritis in a series the fundal findings were negative in 24 In other group of 32 retinal lesions were present in 25 The commoner retinal changes under high blood pressure for years and with arterial changes may be found also in the absence of any impairment of renal function The common changes are usually haemorrhage in the retina tortuous arteries pressing on constricted veins star shaped or other types of albuminuric retinitis etc, more common in patients of high blood pressure

**Urinary findings**—The quantity may be in the compensated stage 2 to 3 liters with greater nocturia and thirst Concentration test shows failure of rise of specific gravity above 1012 or higher the usual being 1006 to 1010 It contains traces of albumin and granular and other casts and the excretion of urea and other nitrogenous elements are lessened with their retention in blood called **azotaemia** Haematuria is usually **indicative of an exacerbation of an acute type** In children **renal dwarfism** is not rare

**Blood etc**—**Anaemia** with 2 million red cells and about 40 per cent haemoglobin is not rare The anaemia may be macrocytic in type The gastric acidity is variable

**Diagnosis.**—The previous history of acute nephritis much greater quantity of urine than in normal with traces of albumin typical granular casts retinal changes azotaemia hypertension with hypertrophy of the heart and others all help

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***Blood etc —Anaemia*** with 2 million red cells and about 40 per cent haemoglobin is not rare The anaemia may be macro cytic in type The gastric acidity is variable

auses may be fevers diabetes mellitus pernicious anaemia aundice Graves disease poisoning by agents like mercury phosphorus arsenic neoarsphenamine group lead, bismuth etc

**Necrotising nephrosis**—Cholera is a common cause of this condition Various chemicals like mercury concentrated mineral acids oxalic acid sulphonal and in rare cases of diphtheria typhoid yellow fever influenza and others

The clinical picture is usually one of the mother conditions of which the nephrosis is secondary

## HAEMOGLOBINURIC NEPHROSIS

**Definition**—It is a form of renal insufficiency following transfusion of blood notably after incompatible blood infusion which causes haemolysis of donors's red cells leading to a haemoglobinaemia or haemoglobinuria may be associated with jaundice and/or renal insufficiency It is also noted in black water fever eclampsia paroxysmal haemoglobinuria poisoning by potassium chlorate mush room etc

**Pathology**—There is in the distal and collecting tubules widespread obstruction from masses of crystalline and amorphous haemoglobin derivatives entangled in epithelial debris and coagulated protein The tubular epithelium shows necrosis and desquamation

## CHRONIC NEPHROSIS

It is said to be less common than large white kidney Though Volhard and Fahr consider this condition to be a degenerative disease Epstein considers it a metabolic disorder with hypothyroidism and lipaemia It may be secondary to diffuse glomerulonephrosis Syphilis is said to be a common cause Diptheria dysentery carbonmonoxide poisoning cholera and other infections etc may cause it

**Age**—Commonly seen in children and young adults decreasing in frequency with advancing years Nutritional defects and probably hypoproteinaemia favour its production

**Pathology**—The kidneys are enlarged or of normal size soft in consistency capsule strips easily leaving a smooth greasy surface On section it is easily cut The fatty or greasy broadened cortex is clearly demarcated from the darker medulla There are yellow streaks with intense fatty change intervening with alternate red areas **Microscopically** there is degeneration in the renal epithelium specially of the proximal convoluted tubules the distal loop being less involved Many of the dilated tubules are lined by flattened cells The **characteristic and striking**

## EMBOLIC NEPHRITIS

(Multiple glomerular embolisation)

**Definition**—Due to lodgement of emboli in the glomerular capillaries the inflammatory element in this condition is secondary and not marked

**Etiology**—Occurs exclusively in subacute bacterial endocarditis and it is quite frequent in the active or in quiescent stage of this disease and was found in 23 out of 25 kidneys of cases of endocarditis

**Pathology**—The organs may be of normal size but are often slightly enlarged The capsules strip easily and the surface except in long standing old cases is smooth But the most characteristic is the small irregular haemorrhages often numerous hence called **flea bitten kidney**

**Microscopically** there is found swelling and granular change of the walls of one or more capillary loops situated in any part of the tuft resulting from minute bacterial embolic lodgement later on progressing on to coagulation and necrosis Some tubules may contain blood

**Clinical manifestations**—There is variable haematuria which may come and go Though usually slight in quantity **copious haematuria points to infarction, usually associated with pain in the loins** There is neither oedema nor hypertension nor renal failure

**Diagnosis, etc**—Haematuria pain in the loins without the signs and symptoms of acute diffuse glomerulo nephritis in the course of bacterial endocarditis points to multiple embolization of the kidneys but acute glomerulonephritis may also be present in the kidneys at the same time

**Prognosis and treatment**—As the bacterial endocarditis is generally fatal except in occasional cases of survival under prolonged penicillin therapy the kidney condition a secondary lesion may not be so material Treatment should be directed towards the cure of the endocarditis by prolonged courses of penicillin heparin and others.

# NEPHROSIS

(Degenerative renal lesions)

**Definition**—These are diseases characterised anatomically primarily by degenerative lesions of the renal parenchyma Clinically they may be divided into **acute and chronic groups** as already mentioned under classification

**Acute group**—Larval nephrosis occurs in the course of febrile diseases or in afebrile toxaemias where there is strong reason to assume abnormalities in the composition of the blood The

(4) Increased rate of sedimentation of the red cells (5) Increase of fat and lipoid content in plasma (6) Hypercholesterolaemia and lowered basal metabolism (7) Sodium ions are retained (8) Urea and nonprotein nitrogen content of blood and renal function are more or less normal

**Course, etc** —The course may extend up to months or years and generally recovery follows but ultimately impairment of renal function with azotaemia as a result of repeated recurrences may close the scene Such persons of lowered resistance may fall easy victims to pneumo strepto and other infections which may prove fatal Pericarditis peritonitis septicaemia may show very mild symptoms in such children or young persons who are not able to put forth good defence.

**Diagnosis** —The younger age anasarca absence of red blood cells and without any cardio vascular change or rise of blood pressure and the absence of renal incompetence help in the diagnosis But sometimes prolonged observation is required before the question of subacute or early chronic nephritis is negatived

**Differential diagnosis** (1) The nephrotic type of **glomerulonephritis or second stage or early chronic nephritis** may have a history of acute onset following some infection manifesting oliguria albuminuria may be associated with other characteristic signs and symptoms of the acute disease mentioned already Hypertension impairement of renal function fundal changes are all important in chronic nephritis generally lack in nephrosis In the absence of syphilis all suspected cases of nephrosis should be kept under prolonged observation to negative the possibility of early chronic or largewhite stage of nephritis—a much commoner condition than chronic nephrosis

(2) **Amyloid kidneys** generally show the original causes of such degeneration such as long standing tuberculosis syphilis, suppurations bronchiectasis and others the liver may be enlarged and so also the spleen with diarrhoea and alabaster facies and others may help Quick disappearance of congo red given intravenously from the blood favours the diagnosis of amyloid kidney

The difference between mercurial poisoning and syphilis from chronic nephrosis is not very difficult and excess of oedema and doubly refractile crystals in the urine are in favour of nephrosis whereas in mercurial poisoning the condition tends to improve in time Syphilitic oedema caused by nephrosis of that origin besides showing a positive W R of blood antisyphilitic treatment may improve matters

**Nutritional oedema** usually does not show any kidney manifestations like copious albuminuria of nephrosis the lowered albumin in blood colloid content and other points like

change is in the deposition of fat and doubly refractile crystals in these cells sometime filling up the entire cell bo

The cause of the production of oedema is more or les same as in subacute or more correctly speaking earlier stag chronic nephritis discussed already

**Clinical manifestations**—In the acute forms of the dis viz the larval and necrotising forms the symptoms of disease to which nephrosis is secondary generally masks clinical picture But the presence of albumin may be up to per cent or more and rarely casts but rapid improvement the clearing of the original disease help in ascertaining the condition In necrotising form also similar remarks almost good *In haemoglobinuric nephrosis there may be vari clinical picture partly depending on this condition and also* the original disease for which blood transfusion is given chronic nephrosis the onset is usually insidious The mo tonous clinical picture consisting of weakness langour headac pallor swelling of the face anasarca may be with nausea vomiting may mark the onset of the disease

**Physical examination**—The patient looks pale but may be so truly anaemic unless kept on prolonged poor diet Th is hardly any cardio vascular change and the blood pressure usually normal In advanced cases there is anasarca ascit hydrothorax, hydropericardium etc Retina as a rule is norm Low basal metabolism hypothyroidism with hypercholesterol mia are common

*Urine*—*Total volume may be 10 to 15 ounces and increa* of oedema diminishing the quantity whereas reduction of oeder tending to increase its output The specific gravity usually 1020 to 1040 principally due to the high albumin content an might be of a cloudy or smudgy or darkish brown colo Sedimentation of urates is frequent The percentage of album may vary from one to two per cent or more In some cas as much as 10 to 25 grams of protein may be daily lost throug the urine Microscopically the centrifused deposit may sho white blood corpuscles epithelial cells hyaline and epithel casts but red cells are rare Slight and transiet glycosuria is no uncommon Urea concentration test is normal and the wate excretion is low The doubly refractile lipoid crystals whe present in the urine in other cellular deposits are diagnostic o nephrosis

**Blood biochemistry**—(1) Decrease of total proteins due to loss of albumin with inversion of albumin globulin ratio as is commonly seen in cases of early chronic or old styled sub-acute nephritis mentioned already (2) Increased fibrinogen content of plasma (3) Decrease of colloid osmotic pressure of plasma.

and albumin globulin ratio but also the urea and cholesterol content of blood should always be estimated and should be a guide to treatment

**Medicinal treatment** **Thyroid extract** —Generally starting from half to one grain thrice daily may go up to 5 to 10 or more grains a day and is useful specially in hypercholesterolaemic cases with low metabolic rate

*Urea*, is an excelllent diuretic and may be given in 15 gram doses thrice daily or more frequently for seven to fifteen days or longer and should always be checked by the estimation of blood urea and urea clearance test of the kidenys The mercurial diuretics are better avoided in these cases because of their irritant action on the kidney and are of great use in cases of non renal oedema notably for heart cases with oedema and dyspnoea at times these mercurial diuretics act like a charm in some of these cases of cardiac oedema

**Caffeine derivatives** are probably not so useful in kidney conditions with oedema

**Alkaline diuretics** like potassium citrate and acetate in 20 grain doses each three or four times a day may be of some use but sodium ions are retained and increase the oedema notably at the earlier tages of treatment

Some of our cases treated lately with tran fusion of human plasma repeatedly and in a few cases once a week for four to five consecutive weeks when the hypoproteinaemia was extreme otherwise two to three transfusions of human plasma or 200 to 300 c c each help to clear up a few cases most remarkably

## AMYLOID KIDNEY

**Synonym** —Waxy kidney

**Etiology** —Rather uncommon after fifty years of age commoner in young people or young adult life Generally it results from chronic suppurations tuberculous or otherwise in bones joints chronic sinuses bronchietasis pulmonary absces syphilis pyonephrosis etc

**Pathology** —The lardecin is related to chondroitin sulphuric acid The kidneys are heavier enlarged and firmer than normal but have the appearance of a large white organ On section the cortex is thicker than normal and has a yellowish white appearance the glomeruli may show as minute white translucent spots The pyramids are dark red iodine stains them mahogany brown methyl violet staining them pink The capillaries of the glomeruli are first affected In some there may be present concomitant interstitial chronic changes The spleen and the intestines may al o undergo similar change Blood albumin is much reduced with almost akin changes in blood biochemistry as in chronic nephrosis

history of chronic dysentery and anaemia etc. generally a able to treatment and good dietary improving the patient help in the difficulty

**Prognosis**—Provided the causes are removable and p and prompt treatment instituted from the very inception of disease and before too much draining of albumin causes ext hypoalbuminaemia the condition is likely to improve Bi chronic cases with too much loss of albumin the course is l to be chronic and protracted There is risk of recurrences

**Treatment**—It is better to test the blood for W R found positive suitable treatment might improve mat Mapharside or arsenoxide alternatin with injections bismuth in smaller doses with oral use of pot odide do m good In India syphilis appears not to be an important ca of chronic nephrosis

**High protein diet**—Before instituting high protein treatment the renal function and the blood urea should estimated Usually they are found to be within normal li and diet suggested by Epstein is on the following princip Proteins 120 to 240 grams fat 20 to 40 grams carbohydrate to 300 grams making up a total of 1250 to 1500 calories da He allowed 1200 to 1500 c.c i e 40 to 50 ounces of fluid . u t sufficient say 4 to 6 grams of common salt to make the ab food acceptable and according to him salt need not be restric is drastically as in oedematous form of nephritis The may contain in the morning one egg eight ounces of milf w fried or beaten or puffed rice two ounces sugar half an ou with a ripe banana and milk casein or fish four ounces th making a total of about 36 grams of protein 26 grams of fat a 92 grams of carbohydrate with a total calory of nearly 624 T lunch may consist of a diet something like the following M (uncooked or raw) four ounces or channa or fish four ounc each Peas or lentils or dal (dry) two ounces rice (atap dr two ounces curd or soured milk (dahi) four to six ounces th diet has a caloric value of nearly six hundred calory and cons of nearly 104 grams of protein about 30 grams of fat and abo 40 grams of carbohydrate The afternoon meal may be som thing like the breakfast already mentioned and the dinner li the lunch

According to Fahr a protein content more than 2 gms per kilo of body weight appears to produce r extra advantage Liver diet as in pernicious anaem appear to have a diuretic effect When the di raises the albumin content of blood suitably generall diuresis starts and the oedema begins to subside But a hig protein diet in all cases of kidney involvement should now an hen be checked by the estimation of not only of blood colloid

## ARTERIOLOSCLEROTIC KIDNEY

**Synonym.**—Benign hypertension Hyperpiesia (Allbutt) Essential hypertension Interstitial nephritis of old writers

**Definition**—It includes those cases of chronic hypertension which neither clinically nor anatomically can be demonstrated to have evolved from antecedent inflammatory disease of the kidneys or urinary obstruction (Fishberg)

**Pathology**—The principal changes are found in the smaller arterioles of the spleen pancreas brain liver etc but notably in those of the kidneys This arteriolosclerosis is probably the result of primary hypertension and degeneration common to members of certain families This high blood pressure on its turn may have originated from a long standing hypertonus of the muscle fibres in the fine arterioles distributed widely all over the body It is probably a functional vaso constriction Generally there is first a hyaline degeneration of the inner coat of the arterioles just under the endothelium to be replaced by fibrous tissue causing arteriolosclerosis with narrowing of their lumen (Gull and Sutton—1872)

**Kidneys** During the earlier stage the kidney may though look normal to the naked eye it is only by a microscopical study of its sections that one can ascertain the sclerosis undergone in the finer arterioles Later on the kidney becomes small granular due to fibrosis reddish in colour the capsule is firmly adherent and strips with considerable difficulty Small cysts may be seen on the irregular surface The organs are irregular (red granular kidney) in surface cuts with difficulty due to fibrous tissue The cortex is diminished there is generalized hypertrophy of the arteriolar coats with secondary atrophy of the renal parenchyma showing hyalinisation of the tubules and pink coloured degeneration of the glomeruli

**Conducive factors**—There is frequent hereditary tendency to the type of hypertension over eating lack of physical exercise poisoning by metals like lead and some pressor substance elaborated through ischaemia of the renal cortex endocrine or adrenal cortex disturbances stress and strain of mdoern life may contribute It is a frequent affection of the civilised world where train of life is considerable The subjects appear full blooded and healthy Sometime in women of middle age one may meet the triad obesity hypertension and diminished sugar tolerance

**Clinical manifestations** This is a common condition in persons near about the age of fifty year and constitutes to be the cause of about 23 per cent of all deaths in America in persons above 50 years of age The patient may complain of headache pain in the nape of the neck worse in the evening epistaxis or subconjunctival haemorrhage weakness and cardiac symptoms like palpitation precordial pain, dyspnoea, angina

**Clinical manifestations**—Clinically the symptoms start insidiously and usually *not earlier than three months of the onset of the suppuration* The patient is pale with alabaster face may be with diarrhoea due to similar changes in the intestine and a palpable spleen due to the effect of amyloid changes in the organs He may be oedematous notably at the later stage

**Urine,** is as a rule copious and may be near about 2000 c c or much more than normal The specific gravity varies from *1003 to 1010 and may be loaded with albumin or may show* moderate reaction The blood changes as already said are like those of chronic nephrosis There is hardly any hypertension or cardio vascular changes unless there is coexisting nephritis Waxy casts may be numerous Doubly retractile crystals may be present in the urine

Course depends on the nature of the original disease which *if removable* cures the kidney condition otherwise not

Diagnosis is done by finding the etiological factor such as suppuration etc already mentioned and the clinical findings the facies anaemia cachexia may be anasarca in late stages palpable liver and spleen diarrhoea and others

**Prognosis**—*Complete recovery in unlikely once the kidney* and probably the liver spleen and intestines are affected Renal *failure* may rarely close the scene *Cardio vascular hypertrophy* and any retinopathy are exceptional

**Treatment**—Remove the cause where possible The efficiency test of the kidneys should be done and when found suitable *a good high protein diet and proper hygienic living and* a *tonic consisting of iron nux vomica etc and a proper share of* vitamins might improve matters But once fully developed nothing might be of much use

# VASCULAR DISEASES OF THE KIDNEY

## (NEPHROSCLEROSIS)

**Introduction**—So long we have seen primary changes *mostly in the glomeruli and the tubules* with *secondary involve*ment of the renal vessels In the present group on the other hand the primary changes are in the vessels and the renal parenchyma and subsequently the whole human sy tem in general being affected secondarily through the primary vascular lesions initiated mainly in the kidneys and other organs

**Classification**—In this group are included several forms of *nephrosclerosis including the* **I** ***arteriolosclerotic kidney*** **showing (a) benign and (b) malignant hypertensive phases** **II** ***Senile arteriosclerotic kidney***

## MALIGNANT HYPERTENSION

**Definition** of malignant hypertension or malignant sclerosis is essential hypertension in which persistent extreme elevation of the diastolic pressure produces acute damage of the arterioles and raised intracranial pressure

**Pathology** In malignant hypertension or in malignant phase of benign hypertension the arteriolosclerosis is more marked in the afferent renal arterioles usually associated with acute arteriolonecrosis and this may cause haemorrhages into the glomerular space or into the surrounding renal tissues This explains the presence of red blood cells in the urine and small punctiform haemorrhages seen on the surface of the organ flea bitten kidney of hypertension in contradistinction from flea bitten kidney of endocarditis described earlier

**"ACUTE ARTERIOLAR NECROSIS** (necrotising arteriolitis) only occurs in association with severe hypertension and can be regarded as the typical vascular lesion of malignant hypertension It takes place in undefended vessels when owing to rapidly rising tension there has been insufficient time for the arteriolar wall to thicken The vessel wall shows changes comparable to those seen in fibrinoid degeneration but in addition at various points along its length plasma and blood cells are forced into the weakened degenerate wall as minute dissecting haemorrhages Cellular proliferation around the lesion develops and a histological picture not unlike that of periarteritis acuta nodosa develops This lesion has been fresuently observed in animals in which severe degrees of hypertension have been induced experimentally and it may arise in the course of a few days As it can be safely assumed that in these animals the vessels were normal before the experiment it is very probable that the changes found are the direct mechanical consequence of high tension on the unprotected arteriolar walls (Recent advances in Pathology—1947 P—157)

**Kidneys** *The organs may be normal or slightly larger in* size with areas of numerous haemorrhagic points and little granular change the colour being brownish or greyish red if the patient has died in the earlier stages of this condition Later light granular changes cause the surface to be slightly irregular and the organs smaller with yellowish areas of fibrosis appearing as depressed areas on the surface in addition to the original brownish colour of the earlier stages Such progressive renal damage may cause *functional insufficiency of the kidneys* some time quickly a fact uncommon in the benign phase of the hyper

and **eye changes** *like gradual failing of* vision all signs of hype tension. **Cerebral vascular** accidents more commonly haemorrhage than thrombosis and also *vertigo tinnitus etc* or *freque* nocturia associated or not with an enlarged prostate may attra the attention towards hypertension *Sometime* ***spasms of t*** **cerebral** vessels may produce convulsions temporary aphasi monoplegia dead fingers etc **hypertensive encephalopathy** mo common in malignant hypertension cerebral oedema with c without convulsions or loss of consciousness may suggest th diagnosis

**Vascular changes causing** ***symptoms*** **like**—nervousness in somnia cyanosis cardiac asthma due to sudden defeat of th *left heart* may be *complained of* Where the vessels of the lun and pancreas are predominantly affected the presenting symp*toms may be those of emphysema lung and diabetes mellitus* with hypertension The kidney involvement is suspected in hyper tension in young subjects

**Physical examination** The patient s history might sho variable curtailment or loss of mental powers The pulse may be thickened and difficult to compress to complete obliteration suggesting raised blood pressure

**Heart etc** The apex of the heart may be more down an *out notably with failure* *The area at the apex is heaving an* increased in size the first sound there is booming aortic secon *sound is accentuated* *The blood pressure is usually near abou* systolic 200 and diastolic near about 120 mm of mercury

**Retinal changes** Ophthalmoscopic examination shows re tinal arteriosclerosis haemorrhages in retina tortuous silver wire arteries passing over constricted pressed veins the latter bein dilated at the site of crossing due to pressure of sclerosed arteries

**Urinary findings,** vary in accordance with the degree of in volvement or not of the kidneys In the average case in the benign phase the volume may be slightly increased sometime with nocturia but the specific gravity is not likely to be much in fluenced at the earlier stages but later on due to greater renal involvement there may be failure of the power to concentrate the urine

**Blood biochemistry** With slight or no renal insufficiency the blood urea cholesterol and the nonprotein nitrogen content may be normal Only a small proportion of subjects of essential hypertension suffer from any serious symptoms or succumb as a result of damage to the *function of the kidneys* *In a few* cases where the pancreatic arterioles are involved there may be *associated glycosuria* and *hyperglycaemia*

**Differential Diagnosis —**

| | Benign Hyperte s on | M lignant I hase | Cl ron c Nephritis (Diffuse) |
|---|---|---|---|
| 1 *Pathology* | Nonprogressive arteriolosclerosis kidney function normal | Progressive ar teriolar necrotic change in kid neys brain heart etc commonly affected R a l granular kidney | Main changes in flammatory and d generative later fibrosis White contracted kid ney |
| 2 *Age* | Near about 45 or 50 years | 30 to 45 years | Generally below 30 |
| 3 *Previous h s tory* | Not of nephritis but may be his tory of family predisposition to hi h blood pres sur | As in beni n phase | Generally history of acute or sub acute k dney diseases |
| 4 *Blood Pres s re* | Fluctuatin u ual diastolic pressure below 120 mm of mercury | P rsist nt diastolic pressure vary in, between 130 to 1 0 mm c mercury | May be constant and not so high as the others in hypertension |
| *Urine* | U ually no abnor mality or slight if at all | May show R B C albuminuria and persistent low specific gra vity when with kidney fail re | Failure of power of concentration of urine, and low specific gravity large in quantity etc |
| 6 *Blood B o chemistry* | Normal | May be abnormal with retention of nonprotein nitro-gen. | Increased N P N in blood. |
| *Eye cl a g s* | Retina normal or only sl ght af fection | Retinal chan es common | Retinal changes may or may not be there. |
| 8 *Terminat on* | Accidents few | Cerebral vascular accidents and failure of heart rarely of kidneys etc | May be uraemia or others |

**Prognosis** In benign hypertension the patient may live longer may be a decade or longer pro ided there is not much progressive renal or cardiac insufficiency but in the malignant phase notably when quickly progressive the patient may oc casionally overcome acute attacks and live unexpectedly longer But evidences of heart or renal failure are serious Retinal changes such as papilloedema or blurring of the margin of the disc and woolly appearance suggest quick progress and are of grave significance Such patients in majority seldom live longer than a year or two after the onset of such retinal changes though

tension The arterioles of the spleen brain pancreas etc are also similarly affected

**Clinical manifestations** It is commoner in males between the ages of 20—45 years but may occasionally occur in boys and younger people This progressive pathological process may pass uneventful from the benign phase till cerebral haemorrhage or some symptoms of raised intracranial pressure or hypertensive encephalopathy or renal failure may draw the attention He might have complained of a few or many of the symptoms described under benign phase but generally terminates in either cerebral vascular accidents, more commonly haemorrhage or hypertensive manifestations of brain or uraemia or coronary or cardiac failure etc may close the scene

**Physical examination** Besides the changes already described under benign phase in heart and blood vessels there might be greater hypertrophy of the myocardium and the diastolic pressure is persistently above 120 mm of mercury and may remain even between 140 to 150 mm of mercury This persistent rise of diastolic pressure though might show fluctuation of the initial stages is one of the suggestive features of this condition

**Ophthalmoscopic examination** may show in addition to what has already been described ***hypertensive neuroretinopathy*** *seen* as albuminuric retinitis and other the disc is swollen red and its edges blurred The retina shows puffed up white areas (cotton wool areas) due to exudate and fatty changes There might be papilloedema

**Course and complications** In benign hypertension the patient may live long except for the danger of the heart and the blood vessels whereas in the progressive malignant phase he may die of cardiac failure uraemia cerebral haemorrhage coronary troubles etc intercurrent diseases such as broncho pneumonia pneumonia pleurisy pericarditis etc may complicate and be sometime terminal Attacks of cardiac asthama or Cheyne Stokes breathing etc are of serious import In progressive kidney changes there may be in addition some or many of the findings of nephritis

**Diagnosis** The persistently high diastolic pressure progressive course of the disease retinal changes indicative of severe nature of the mischief failure of kidneys as shown by the examination of the urine blood biochemistry and renal functional efficiency test or cerebral vascular lesions differentiate it from benign hypertension

*Hypotensive drugs* (a) *Rauwolfia serpentina*, (sarpagandha chorchandor etc) A liquid extract in 10 to 15 drop doses of this remedy twice or thrice daily with water may be of definite use It has a sedative as well as a pressure lowering effect But the results may not be constant in all patients (b) **Nitrite group** Sodium nitrite in half to one grain doses thrice daily or erythrol tetranitrate in the same dose notably due to the more lasting effect of the latter may be of use in serious cases But their prolonged use is not advocated (c) **Purine derivatives** like theophyllin or euphyllin or aminophyllin etc or diuretin in two to five grain doses act in several ways They are vasodilators and have special action on the vessels of the kidneys and the heart and through improved coronary circulation they increase cardiac nourishment and efficiency (d) As an emergency measure **venesection**, thus drawing out of 6 to 10 ounces of blood from a vein preferably at the elbow may be of relief (e) In the presence of ***hypertensive encephalopathy*** 25 per cent mag sulph solution 4 to 8 ounces may be used as a retention enema Lumb puncture venesection etc may do good Concentrated saline or 50 per cent glucose or both may be given intravenously thus drawing fluid from the tissues as well as from the brain may help by relieving cerebral congestion Injections of sedatives like 7 to 10 ccs of paraldehyde or injectable barbiturates may help by causing rest and sleep

## THE SENILE ARTERIOSCLEROTIC KIDNEY

This condition is found in elderly people with atherosclerosis of the bigger vessels The kidneys are not changed except that the infarcts of the bigger arteries cause the organs to be scarred and contracted with healthy kidney tissues in between

**Pathology, etc** The infarcts of interlobular arteries are conical depressed and red with their base on the surface of the kidney The glomeruli supplied by such affected vessels gradually die out and connective tissue forms round them In short the pathological process is atrophy following insufficient circulation with consequent fibrosis

**Clinical manifestations** Though there is gradual contraction of the spheres of bodily and mental activity (Allbutt) yet nothing like the quick and progressive changes as in malignant hypertension are noticeable

**Urine** contains trace of albumin but the functional tests are normal

**Arteries etc** Arteries are thickened radial or brachial may show thickening The **blood pressure** is not raised nor is there any cardiac hypertrophy The common modes of ending of arteriolosclerotic kidney are also unlikely

rare cases are reported to have lived eight years after the of the above lesions Younger the patients and higher the tolic pressure and more progressive the course notably involvement of the kidneys heart and blood vessels spec *of the brain the more serious* is the outlook Usual cause death may be heart failure cerebral vascular lesions urae coronary thrombosis secondary infections etc

**Treatment Preventive** In asymptomatic cases it is b probably not to divulge that that the patient is suffering high blood pressure detected accidentally or during the co of routine examination In our country though tending to commoner than before certainly it is not as common a America With little alteration of general regime where wor and anxieties and excesses of all types notably in eating drinking or hard physical exercise etc are the causes much be achieved Mild moderate exercise with a square diet of reas able quantity and frequency an effort to keep the body wei optimum because it is the fatty and overweight who are m prone to hypertension and avoidance of constipation by incre ing the share of vegetables etc are of service

**Symptomatic** Our treatment is rather unsatisfactory nota in progressive cases as the lesions are generally beyond cont According to Fishberg many individuals with essential hyp tension not only need no treatment whatsoever but are mu better off without it

**General Measures** He should be freed from worries anxieties and also from the strain of life as far as possible moderation in everything should be his watchword Regular hou moderation in work exercise proper diet and most important lo hours of rest and sleep are essential Those who can shou smoke only after meals and if possible smoking may be giv up Keeping late hours at night meeting or cinemas excitemen pecially in close stuffy places are unsuitable Physical exercis like *golfing* walking swimming but no in cold water moderation and short of exertion are helpful and may do good

**Measures to lower the blood pressure** About rest and phys cal exercise details have already been given For the bowe divided doses of calomel in the evening after meals followed salines in the next morning may be of service Hypnotics the barbiturate group in 1 to 3 grain doses at bed time may hel by securing sleep and rest Some believe in giving a mixtu containing 5 grains of potassium iodide 10 grains of potassium bromide with a dram of soda sulph and 5 drops of tincture bel ladona with syrup 1 dram and up to an ounce by water one dos thrice daily with milk to avoid iodism Personally I think may be of use

(2) Due to increased destruction of protein and blood also due to alimentary intoxication in children diabetic acidosis acute affections of the liver by altered functions

**Clinical manifestations**—Generally there is asthenia physical and mental which may lead to coma Twitching vomit diarrhoea pruritus urine like breath and may be with other classical manifestations of this metabolic disorder may make the picture complete The person is usually dehydrated and peripheral circulatory failure is common

**Blood biochemistry**—(1) There is increase not only of urea but also of uric acid creatinine etc Some cases may show even upto 300 mgm or more of urea per 100 c c of blood (2) Hypochloraemia means decrease of chloride content of blood from normal figure of 350 mgm to 150 or lesser per 100 c c of blood (3) Acid base balance of blood is also upset As for example acidosis is associated with diabetic coma and alkalosis with prolonged vomiting

*Urine*—*There is as a rule marked oliguria which may pass on to anuria* the specific gravity is high and there may be moderate albuminuria cells and casts

**Diagnosis,** is made by the etiological factor clinical picture blood biochemistry urinary changes and response to appropriate treatment

This condition has got to be differentiated from the clinical pathological and biochemical picture of the various condition giving rise to them

**Treatment,** should be according to the cause. In serious cases slow intravenous drip of saline and glucose up to 2 to 3 pints care being taken of the heart and circulation and guided by the specific gravity and haematocritic reading of the patient s blood If the urine is alkaline more saline might have to be given Diabetes mellitus with or without coma should be treated by glucose insulin as detailed out thereunder Acid sodium phosphate in 20 to 30 grain doses and not ammonium chloride every few hours is the acidifier of the urine to be used

## RENAL AZOTAEMIA AND URAEMIA (RENAL INSUFFICIENCY)

**Definition** — Uraemia means the symptom complex resulting from renal insufficiency and accompanying the retention of urinary constituents in the organism They are mostly end products of protein katabolism

In kidney failure in chronic nephritis this evil effect may partly be due to excessive urinary elimination of water and salts resulting from defective tubular reabsorption

**Probable theories as to the causation**—(1) Sometimes the kidneys fail to excrete acid sodium phosphate giving rise to

As it is a common happening of most of the elderly people very little interference or treatment is called for

## URAEMIA

**Definition**—Though originally this term was used to denote symptoms resulting from retention in blood of various excretory products passed through the urine and mainly the urea yet *now we know uraemia to be a symptom complex resulting* from renal insufficiency and accompanying the retention of urinary constituents in the system associated with profound metabolic disturbances

**Azotaemia and Uraemia**—**Azotaemia** is increase of non protein nitrogen conten of blood It is a change in blood biochemistry and is one of the main features of uraemia and generally no groups of symptoms should be called uraemic unless there is high N P N in blood This azotaemia may be (1) Pre renal (2) Renal (3) Post renal

**Causes of Pre renal azotaemia**—Common extra renal cause are (1) Severe and protracted vomiting as in pyloric or intestinal obstruction *hyperemesis* gravidarum (2) Much loss of intestinal fluids as in *diarrhoea cholera in adults and children* (3) Certain affections of the liver and biliary passages and not uncommon is gall bladder surgery called hepato-renal syndrome or liver death (4) Diabetes with ketosis and loss of alkali reserve in coma or precomatose stage (5) Crisis of Addisons disease (6) In traumatic shock (7) In post operative collapse (8) In circulatory collapse of some acute infections general sepsis etc (9) *Widespread burn with* shock (10) In some cases of coronary thrombosis with shock (11) Following profuse haemorrhage notably from gastro intestinal tract haematemesis and *melaena* (12) *Terminal* stages of heart failure

**Pathology**—(1) **Impairment of kidney function** The urine though of high specific gravity considering the oliguria it should have still higher specific gravity but the kidney function appears to be impaired by hypochloraemia or loss of chlorides from the blood low arterial blood pressure sometime with diminishd blood flow and also through the action of toxins of acute infections liver damage etc all acting on the kidneys and also due to alkalosis from **vomiting through loss of** hydrochloric acid In cholera probably by dehydration and lessened *blood flow through the kidneys similarly probably may be* explained the azotaemia of black water fever and also in viper bite in both there is haemolysis and renal vascular stagnation anoxia with the kidney tubules being blocked by the destroyed red cells and pigments

(2) Due to increased destruction of protein and blood also due to alimentary intoxication in children diabetic acidosis acute affections of the liver by altered functions

**Clinical manifestations.**—Generally there is asthenia physical and mental which may lead to coma Twitching vomit diarrhoea pruritus urine like breath and may be with other classical manifestations of this metabolic disorder may make the picture complete The person is usually dehydrated and peripheral circulatory failure is common

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**Probable theories as to the causation**—(1) Sometimes the kidneys fail to excrete acid sodium phosphate giving rise to

diminished alkali reserve of blood this when extreme may cause dyspnoea nausea and vomiting etc by central action (2) Retention of phosphates in blood causes a consequent reduction of serum calcium which in its turn produces increased irritability of nerves giving rise to tetany muscular twitchings and may be to some haemorrhages (3) *Retention of protein metabolites* arising out of kidney incompetence may cause an attempt at vicarious elimination through vomiting and diarrhoea That part of urea excreted through saliva decomposed by bacterial activity in mouth probably gives rise to the characteristic ammoniacal smell of breath in uraemic patients It is suggested that the irritation by ammoniacal products and in the process of excretion of other toxic metabolites give rise to the enteritis with diarrhoea or other intestinal ulceration manifesting dysentery Nausea vomiting and anorexia due to gastritis of the same origin may be distressing (4) Probably product of intestinal putrefaction such as indican phenol and others normally excreted through the kidneys when retained may contribute to the production of uraemic symptoms (5) Temporary increase of blood pressure with spasm of cerebral vessels (hypertensive encephalopathy) may be mistaken for uraemic manifestations (6) As already said due to excessive urinary elimination of water and salts resulting from defective tubular reabsorption partly as a compensatory mechanism when associated with may be diarrhoea or vomiting by increased haemo-concentration may upset the vital activities thus deranging the whole metabolic process

**Clinical manifestations** —Uraemic manifestations may be acute or chronic

**Acute Uraemia Pathology** —The kidney and heart will show appearances according to the relative duration type nature etc of the renal lesion In acute conditions there is oedema of the brain which appears bulky the blood vessels may be ischaemic and the ventricles are small and there is increased pressure in the cerebrospinal cavity Whereas in **chronic cases** the brain is pale and dry

**Clinical features** —Clinically the patient may be a subject of either (a) acute nephritis (b) acute exacerbation on chronic nephritis or (c) only hypertensive subjects without nephritis or may show nephrosclerosis It appears **to be more commonly associated with hypertension than with azotaemia** hence in nephrosis when even chronic these cases are seldom encountered

Before actual attacks the blood pressure rises and in some there may be prodromal symptoms like anorexia headache weakness paraesthesia to be followed by sudden convulsions local or general or one limb or groups of muscles or of the whole

body going into tonic or clonic spasm may be to be followed by coma Blindness more commonly temporary than permanent of one or both eyes may be complained of On ophthalmoscopic examination one may find the disc to be swollen red and edges blurred There might be cotton wool or snow bank like appearance in the retina as a result of oedema exudation and fatty change Haemorrhagic areas are common Arteries are in spasm and may be silver wire like The veins are pressed upon and dilated as a result of pressure by sclerosed vessel **(Most symptoms are due to hypertensive encephalopathy and neuroretinopathy)**

**Course** —In serious cases death may occur in a short time in others recovery may take place with elimination lowering of blood pressure and by other suitable treatment **Complications** may be cerebral haemorrhage permanent paralysis and eye changes and others

**Differentiation** —Convulsions and coma result from numerous causes having widely different pathogenesis The diagnosis is usually established by the clinical history pointing to nephritis or not the appearance of the patient mode of onset examination of the blood pressure urine cerebrospinal fluid Blood biochemistry etc

In nonuraemic hypertensive encephalopathy there is no retention of N P N the urine may be normal only the blood pressure is high notably during an attack

For the details of differential diagnosis see the corresponding paragraph under chronic uraemia in subsequent pages

**Prognosis**, is usually grave except in cases of acute nephritis

**Treatment** —The main principle of management is to lower **the very high blood pressure which is the immediate precipitating cause of the encephalopathy**

Put the patient is bed or on the floor of a quiet cool well ventilated room remove false teeth and loosen the tight clothing etc Raise the head end of the bed where possible Ice cap on the head may do good If he can swallow one can give an ounce of saturated mag sulph solution orally Intravenous injection of 25 to 50 per cent glucose 50 to 100 c c or 10 to 25 per cent sterile sodium chloride solution or both combined in severe cases by withdrawing fluid from the oedematous brain may help by lessening the risks of repeated convulsions If in spite of all this convulsions continue one might try several things (1) Intramuscular injection of some sodium salt of barbiturate such as luminal sodium or gardenal sodium amytal sodium or delvinal sodium in 1 to 3 grain doses and that repeated every six to eight hourly where required (2) Injection intramuscularly of seven to ten c c of paraldehyde may be of use by causing sedation and sleep (3) Sometime intramuscular injec

tion of 5 to 10 c c of 25 per cent sterile mag sulph soluti may do good and may quieten the patient (4) To lower t blood pressure after a bowel wash a retention enema of abo 8 to 10 ounces of 25 per cent mag sulph solution may do goo (5) Venesection with letting out of 8 to 12 ounces of blood ma be tried but is generally unnecessary except in very emerge cases (6) A careful *lumber* puncture and gradual withdraw of spinal fluid may be of help The foot end of the bed ma be raised while doing the lumber puncture in order to preve sudden and quick drainage of the cerebro spinal fluid

The rest of the treatment after the patient has surviv *the first attack will depend mainly on the cause either with o* without involvement of the kidreys Hypotensives and a sui able low calory diet but with adequacy of vitamins by regula action of bowels by mag sulph solution in the morning wit plenty of rest etc may be of use Withdrawal of common sal *from diet and a lacto vegetarian regime may do good*

## CHRONIC URAEMIA

The common causes are (a) chronic nephritis occasionally at the acute stage rarely in the earlier stages of chronic variety (b) Acute necrotising nephrosis due to poisoning by hydrarg perchlor arsenicals or after cholera blackwater fever vipe bite *yellow fever infectious jaundice* etc (c) *Primary or essen* tial hypertension generally in the malignant phase more com monly produces symptoms of acute uraemia already describe *but may occasionally cause chronic uraemia* (d) *Anuria* or suppression of urine or obstruction when bilateral such a bilateral pyelo nephritis and others (e) Improper kidney func tion due to (1) bilateral hydronephrosis (2) polycystic kidneys (f) Chronic amyloid nephrosis or chronic nephrosis

**Clinical manifestations**—The subject is one of chronic nephritis or suffering from the conditions mentioned already For easy understanding the manifestations may be divided into (1) nervous (2) gastro-intestinal (3) respiratory or (4) com binations of all or some of these

***The onset,*** is as a *rule insidious*

(1) **Nervous manifestations**—The patient may complain of physical and mental weakness heaviness of the head or dull heada he more common in uraemia and the severe types charac terise the onset of hypertensive encephalopathy already described in the previous chapter diagnosed by a gradually rising blood pressure Apathy inability to concentrate may be insomnia restlessness etc muscular twitchings are rather common mor *due to lack of ionised calcium* and may be characteristic of uraemia There might be persistent hiccough Convulsions of a violent type is indicative more of hypertensive cerebral attacks

than of uraemia Reflexes are not altered except that they may be more brisk partly due to lack of ionised calcium in the blood Blindness terminating in coma may close the scene

(2) **Gastro intestinal** The tongue of the patient feels dry and he may complain of a burning sensation in the mouth The buccal mucosa are dry glazed probably due to uraemic stomatitis already explained A brownish green furry coating may be found on the tongue there might be ammoniacal or urinary odour in the mouth Vomiting diarrhoea and dysenteric manifestations of the colon due to uraemic ulceration may not be uncommon **In infective dyspepsia or other diarrhoeas the vomiting stops first and then the diarrhoea along with improvement But in uraemia the diarrhoea may stop and the vomiting persist** There may be bouts of violent purging and enteritis associated with vomiting simulating cholera Some uraemic patients may however be badly constipated to change to severe stage of diarrhoea or colitis and these may prove terminal The diarrhoea in nephritis has got to be differentiated from vicarious uraemic diarrhoea in which the blood N P N is raised with other manifestations

(3) **Respiratory —The breathing is usually quiet and without a stertor** and may be hissing in character a point to be remembered in examining comatose patients Paroxymal nocturnal dyspnoea (cardiac asthma) may be hypertensive in origin Cheyne Stokes or irregular breathing may be seen at the end or may last for days and weeks Occasionally Kussmauls air hunger type of breathing as in diabetic coma may be seen with acidaemia and fall in alveolar carbondioxide tension etc Typical hissing breathing may not be present Only bronchospasm but not true asthma may be met with **The terms renal or uraemic asthma are misleading and hence better avoided** There might be persistent pruritus The temperature is generally subnormal and the patient emaciated and pale

(4) There might be various combinations of the above types of manifestations.

**Late findings** may be the patient is emaciated with a pale dry skin may be drowsy or comatose with or without delirium and hallucinations etc And most of the findings of respiratory and gastro intestinal types of symptoms in uraemia may be there

**Laboratory findings** **Urine** —The suggestive points ar persistent low specific gravity increased quantity as in chronic nephritis or oliguria or anuria with red blood cells or blood casts suggesting acute *lesion may help*

**Blood** —The urea and nonprotein nitrogen content of blood is generally above 100 mgm per 100 c c of blood with it there is also increase of uric acid creatinine phosphates etc

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temporary blindness or weakness of limbs etc and generally comes at rest more commonly late at night with stagnation of cerebral circulation, sometime associated with reduced blood volume as in infection inanition purgation starvation etc all favouring clotting in the cerebral vessels and almost as a rule associated with hemiplegia and there is hardly any finding of renal insufficiency

**Diabetic coma**—The onset may resemble chronic uraemia but a careful examination of the urine sweetish smell or acetone in the mouth and a high blood sugar and urine sugar with ketone bodies and absence of renal insufficiency point to the diagnosis

**Cholaemia or acute failure of hepatic function**—There may be jaundice or other signs of hepatic damage such as enlargement tenderness of the liver later on the organ becoming impalpable may be with ascites and increased bilirubin content of blood and suggestive van den Bergh reaction and tests of liver function with the absence of renal failure should help

**Extra renal azotaemia** has already been discussed

In our country the question of febrile causes like malaria meningitis thermal affections which might have started with fever to be afebrile subsequently might be diagnosed by the examination of the blood lumber puncture mode of onset etc and the findings negative to the renal insufficiency should clear up the difficulty

**Prognosis** of chronic uraemia is generally serious because it means some form of renal incompetence and except in the acute form which might improve the prognosis is rather limited and life is only possible so long as elimination is sufficient and enough to maintain life without poisoning

**Treatment**—Principles are (1) restrict the metabolism of the system within the limits of excretary power of kidneys by reduction of activity thus minimising the endogenous catabolism and also by reduction of proteins and mainly switching on to a lactovegetarian diet (2) Promotion of excretion through bowels skin and according to the power of kidneys by saline purges and keeping the skin clean and thus free to perspire and allowing as much as the kidneys can do (3) Adjustment and correction of altered biochemistry of blood such as dehydration hypochloraemia hypocalcaemia increase of the alkali reserve which is diminished etc

**(4) Symptomatic**

(1) Limit the diet of the patient to about a pound of milk and its preparations in all consisting nearly 25 to 30 grams of protein Rest of the diet may be made up of sugar carbohydrates etc A lactovegetarian diet guided by the non protein nitrogen of the blood and other clinical symptoms with

Renal functional test may help to confirm the diagnosis

**Course** may be short or long according to the underlying pathogenesis In chronic uraemia the patient may linger for some time and even may get better for the time being to drift on to the same condition after a variable period

**Complications**—(1) Due to lowered resistance secondary infections like pneumonia broncho-pneumonia peritonitis bacillary dysentery pleurisy and pulmonary tuberculosis may be superimposed or sometimes may be terminal (2) Various types of cardiac complications associated with failure or not cardiac asthma sometime heart block etc are not uncommon (3) Pericarditis somehow or other is common

**Diagnosis** is made by such clinical symptoms like those described already in persons known to have kidney disease or in elderly subjects should arouse suspicion of uraemia to be confirmed by finding of suitable blood biochemistry urinary examination heart and retinal changes etc

**Differential diagnosis**—**In head injury** with convulsion and coma there are usually signs and symptoms of localization of the lesion and in the presence of unilateral paralysis like hemiplegia following convulsions is likely to be due to some local cause X Ray of the skull and lumber puncture findings etc and absence of any kidney lesion exclude uraemia

In cases of **hypertensive cardiorenal syndrome** with a failing heart *the difficulties may be considerable but here the* relative predominance of the respective conditions might help Also *a careful exclusion of renal insufficiency may point to the* real diagnosis

Cerebral lesions like **tumours and gumma are** usually of low onset and usually with symptoms of raised intracranial pressure such as headache vomiting and papilloedema may be difficult to distinguish from uraemia But in these lesions a chronic course may be Jacksonian epilepsy and the negative urinary and blood biochemical findings but suggestive X Ray appearance of the skull and lumber puncture findings should help

**Cerebral vascular lesions** haemorrhage is more common in hypertensive subjects coming on suddenly in a more or less healthy person common during anger fury passion at stool or after food when the blood pressure is likely to be maximum sudden unconsciousness which passes on usually to unrousable coma with *hemiplegia and sudden rise of intracranial pressure* and presence of blood in the cerebrospinal fluid and generally *ending fatally and negative findings of kidney* lesions should help

**Cerebral thrombosis,** may come rather gradually usually with premonitary symptoms like headache monoplegia

onset is usually like other forms of uraemia slow and insidious but may occasionally be sudden the initial symptoms having passed unnoticed Mental and physical fatigue loss of weight anaemia gastro-intestinal symptoms like anorexia nausea, vomiting less commonly diarrhoea may be present The nervous symptoms and the raised nonprotein nitrogen content of blood diminution of alkali reserve etc may make the picture complete Vomiting and drowsiness may usher in coma and death may follow in 10 to 15 days or earlier unless the urinary obstruction is removable

**Treatment** —The treatment should be according to the cause In surgical operations preventive measures like suitable anaesthesia transfusions of glucose saline or compatible blood may be of use

The symptomatic lines of management are (1) to cambat dehydration and (2) adjust acidosis or alkalosis These are discussed under uraemia and also under the treatment of cholera

### *The Crush syndrome*

During the second world war as a result of aerial bombardment many persons were crushed or pressed or pinned beneath o against masonry or other hard objects resulting in compression with consequent necrosis and disintegration and autolysis of large amount of tissues the burden of whose excretion fell on the kidneys Apart from the local trauma and symptoms of shock and haemorrhage the principal clinical manifestations were a marked oliguria associated with myohaemoglobinuria and presence of numerous pigmented casts in the urine causing complete anuria azotaemia and death from uraemia Amongst the tubules the ascending loops of Henle and the second convoluted tubules were largely obstructed by pigmented casts containing myohaomiglobin and the anuria partly being accounted for the changes in the renal epithelium Treatment consists of giving orally sodium citrate and bicarbonate and not potassium salts Otherwise when found ineffective these with glucose might have to be given intravenously by drip method

**Traumatic Uraemia** —Fatal uraemia associated with anuria also occurred in severe war wounds and also from extensive injuries with massive tissue destruction in industrial accidents in which limb compression and muscle necrosis are not much in evidence The pathogenesis of this is though obscure yet the main lesion is in the renal tubules Treatment is in the lines of crush syndrome already discussed

abundance of vegetables to appease hunger and reasonable amount of fat specially at the urgent stages may be of service Salts should be restricted Fluids should have to be given and freely but in the presence of heart failure the amount has to be made reasonable

(ii) Saline purgatives specially ounce doses of saturated mag sulph solution in the morning for an adult may be useful A salutary diarrhoea an effort to excrete waste products through the bowels need not necessarily be checked unless very weakening Strong diuretics with damaged kidneys are risky hence ordinary alkaline diuretics consisting of potassium citrate and acetate 10 to 15 grains each with liquor ammon acetate dram one syrup one dram and water up to an ounce thrice daily may be of use Skin for purposes of elimination is not so useful Ordinary diuretics and diaphoretics are usually sufficient In the presence of heart failure digitalis intravenous glucose with or without coronary dilators etc are indicated according to requirement

(iii) Alkalies orally or rectal or intravenous alkaline saline with glucose and calcium may solve the problem The other lines have been discussed under prerenal and acute uraemia

(iv) For headache restlessness insomnia etc sedatives hypnotics lumber puncture etc discussed already may be of use Muscular twitchings demand calcium preferably intravenously of 3 to 5 c c of 10 per cent solution of calcium gluconate and acts like a specific For the treatment of convulsions the therapy in acute uraemia should be consulted Nausea vomiting may be toxic and due to acidosis requiring elimination alkalies glucose saline etc For other details see the treatment of vomiting in cholera black water fever etc (page 62) Hiccough may be again due to the same causes as nausea and vomiting demanding more or less the same lines of eliminator or such like therapy Haemorrhages etc require C and K vitamins preferably by injections and also calcium and various other known methods

## POST RENAL URAEMIA
### (Latent Uraemia)

The **main cause is anuria** which may be divided into (1) prerenal azotaemia already discussed (2) Renal causes have already been discussed also and (3) the post renal condition has also partly been discussed and besides what has been detailed out **already sulphonamide crystalluria** due to a combination of effect on the tubules and toxicity may produce this condition

Clinically besides anuria there may be no other symptoms for a day or two the patient feeling more or less well The

acute or the second stage or large white kidney stage and (2) the other dry or azotaemic or the third stage or the secondary contracted white kidney stage

In the so called **second stage, or earlier** stage of chronic *nephritis oedema* is the *most important* sign which may b extreme There is marked albuminuria due to the additional membranes Renal function is generally little altered though the kidneys are grossly affected there is "**compensated renal hypofunction**" There are lipoid crystals and fatty casts in the urine loaded with albumin with some oliguria The bio chemical and the other changes in the blood are more or less like those of nephrosis such as increased cholesterol content hypoproteinaemia to be more exact hypoalbuminaemia due to prolonged and continued loss of albumin and there may be even a reversal of normal albumin globulin ratio The oedema is due to (1) hypoalbuminaemia (2) altered permeability o the endothelium which becomes *hyperpermeable* (3) *reversion of* osmotic tension from endosmosis inside the blood vessels to exosmosis into the tissues (4) Altered pH of tissues with reten tion of other oxidation products and metabolites (5) retention of watery fluids for which sodium ions are also necessary and hence *retained and thus increases the oedema* (6) *pressure on* the lymphatics veins and the nerves may impart a sense of stretching etc At this stage the oedema fluid contains 0 1 pe cent whereas in the acute stage 1 0 per cent of protein The basal metabolism is as a rule low He may improve and be come normal or may die of intercurrent diseases specially pneumococcal peritonitis and other infections or by drowning oedema or from other troubles

The passage into the **third stage** ushers in with signs of renal failure Sclerosis of the affected glomeruli and conse quent *upon the* withdrawal of *blood supply from these area* albumin diminishes or disappears from the urine There i polyuria or limpid urine **having low but fixed** specific gravity Due to reduction of the number of functioning kidney units there is failure of power of concentration showing "**de compensated renal hypofunction** and consequent *azotaemia* **The failure of power of concentration with low and fixed speci fic gravity of the urine is one of the most important and characteristic findings at this stage** Besides other casts those consisting of kidney tubules having undergone **granular changes** when passed are suggestive of a chronic lesion

The patient is oedema free Blood hows retained noprotein nitrogen content lowered *calcium and CO2 combining* powe The heart is hypertrophied and the blood pressure rises The symp toms or the end may be through uraem a (failure of the filter)

## SUMMARY AND CLINICAL PATHOLOGY OF NEPHRITIS

### SUMMARY

To sum up during the **acute stage** of nephritis commonly met with in persons under 30 years of age usually developing as a rule a week or longer after some infection mostly by streptococci commonly in the throat, skin or in other places causes sensitiveness of the kidneys to the toxin of the streptococci in the process of immunization of the system and is generally precipitated by local chilling etc of the kidneys There is **diffuse endocapillaritis of the glomerular loops** and also to some extent of the endothelium of the capillaries of the system in general Later come swelling and proliferation of *the endothelial cells of the glomerular capillaries* as the condition is **more proliferative than exudative,** with accumulation of inflammatory exudate and red cells and leukocytes finding their way into the loops mainly by diapedesis thus blocking of the capillaries **cause marked glomerular** ischaemia partly explaining the rise of blood pressure in about one third of cases at the acute stage Then follows *proliferation of the glomerular epithelium* but apparently subsequent to the endocapillaritis Tubular changes generally are secondary to glomerular alterations and come later on

**Clinically** in a typical **acute case** there may be pain in the loins slight fever puffy eyelids oliguria or albuminuria cylindruria The urine is high coloured or even smoky due to the presence of red blood cells The specific gravity is raised and the acute nature of the mischief is found out by the presence of **red blood cells or red blood casts** there may be other casts also The **blood pressure** is usually higher than normal and in blood *there is increased nonprotein nitrogen* content which is retained and cannot properly be excreted The power of concentrating urine diminishes But in many cases a few or none of the symptoms except the suggestive urinary findings may be noted Some cases improve the permeability increases as judged by the increase in quantity the blood and albumin diminish the blood biochemistry improves till the patient makes a complete recovery in a few weeks to months time specially under proper supervision and regime

Failing proper treatment or the infection and exciting causes persisting many appear to pass to the **second stage of olden days calssification, whereas** some pass **imperceptibly to the third or chronic stage without** passing in to a clear cut second wet or subacute or early chronic stage of nephritis Hence in the classification given earlier only two stages have been mentioned they are acute and chronic and this again divided into two groups (1) with oedma or the so called sub

causative factor of this hypertension stressed long ago by workers

**Retinal changes**—Renal or albuminuric retinitis is generally characterised by collection of exudates and haemorrhages in the retina The exudate may appear as soft white cotton wool patches impairing the local translucency or as star-shaped area radiating in lines or as rays from the macula or other place Microscopically the exudate consists of an infiltration of the layers of the retina by a fine net work of fibrin some of which are absorbed by large lipoid filled phagocytes and the rest becoming hyalinised Flame shaped haemorrhages are common in the retina The prognosis of renal retinitis is more grave than that of arteriolosclerotic retinitis the patients affected with former seldom survive two years while the patients affected by latter may live for years to die of cerebral haemorrhage heart failure and other troubles

**High blood urea** content of blood is common in the first and third stages of kidney disease and is usually absent in the pure tubular lesions as in nephrosis and large white kidney or second stage of nephritis The details of these matters have been discussed under uraemia The simple urea concentration test of Maclean is simple useful and informative

**Dyspnoea,** is probably an attempt on the part of the body to excrete more carbondioxide a weak acid in order to reduce the increase in the hydrogen ion concentration or reduced alkali reserve of blood due to retention of non volatile acids by the kidneys

**Uraemia,** has been thoroughly discussed already

**Hypertensive encephalopathy,** and disturbance of cerebral circulation is probably the basis of the cerebral symptoms the so called convulsions of uraemia These attacks are probably of vasomotor (central) origin due to arteriolar spasm and are caused by a rapid rise in blood pressure above the previous level Cerebral oedema resulting from acute disturbance of cerebral circulation with increased permeability of the vessels may occur True uraemia in its strict sense is a toxic phenomenon concerned with retention of nitrogenous metabolite and acidosis where convulsions or focal cerebral signs are not common In children acute glomerulo nephritis associated with rise of blood pressure and cerebrospinal fluid pressure may show symptoms of hypertensive encephalopathy but without retention of nonprotein nitrogen in blood **The meaning of hypertensive encephalopathy is cerebral functional morbid state resulting from abnormally high rise of blood pressure** The experimental work of Andrews suggest that uraemic syndrome can be produced by a disturbance of the acid base equilibrium and of the mineral salt balance The convulsions are commoner at the height of blood [illegible]

or of the heart, **(failure of the pump)** or less commonly failure of the **(tubes)** blood vessels There may be characteristic retinal changes like albuminuric retinitis and at times hypertensive encephalopathy and neuroretinopathy or intercurrent diseases closing the picture

## CLINICAL PATHOLOGY

**Albuminuria,** is now known to be definitely of glomerular in origin although tubules also allow due to degeneration and may play their part specially in the large white kidney stage and in nephrosis

**Casts**—There appears a present day bad tendency to neglect the careful examination of the casts in favour of the more popular study of blood biochemistry but it should be remembered that the casts give the exact picture of the inflammatory and/o degenerative changes in the tubules A **hyaline cast** indicate slight glomerular leakage with no active tubular degeneration and is passed by normal persons after physical exertion etc **Cellular casts** denote definite activity of the morbid process **granular casts** moderate activity the admixture of **red blood cells** or casts give sign of glomerular haemorrhage and generally indicate acute lesion For proper study of casts the urine must be fresh but if alkaline in reaction or has been allowed to stand for some time the casts may get dissolved out and disappear Moreover the absence of casts in an alkaline urine is not of the same significance as when the urine is acid for the latter reaction assists in the formation of the casts The casts are formed by the cogulable albuminous material though tubules give the shape yet glomerules supply the essential hyaline matrix

As pointed out by **Addis** long ago that in certain cases of renal failure a peculiarly broad cast is present which does neither disintegrate in distilled water nor in diluted urine as do hayline casts Under these circumstances the blood urea level was always found to be above 100 mgm per 100 c c of blood and most of the patients died of true uraemia

**Oedema**—The mechanism of oedema has already been described specially in the summary

**High blood pressure**—The hypertension seen in about one third of acute cases has already been explained But that of chronic glomerulo nephritis is probably a beneficent compensatory reaction It is probable that partial or complete occlusion of large number of the glomeruli in chronic stage render filtration more difficult and the rise of blood pressure probably is an effort to overcome this difficulty But the recent idea that reduction of renal cortical tissue and consequent liberation of a renin like substance cannot be outruled as the underlying

causative factor of this hypertension stressed long ago by workers

**Retinal changes**—Renal or albuminuric retinitis is generally characterised by collection of exudates and haemorrhages in the retina The exudate may appear as soft white cotton wool patches impairing the local translucency or as star shaped area radiating in lines or as rays from the macula or other place Microscopically the exudate consists of an infiltration of the layers of the retina by a fine net work of fibrin some of which are absorbed by large lipoid filled phagocytes and the rest becoming hyalinised Flame shaped haemorrhages are common in the retina The prognosis of renal retinitis is more grave than that of arteriolosclerotic retinitis the patients affected with former seldom survive two years while the patients affected by latter may live for years to die of cerebral haemorrhage heart failure and other troubles

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the higher the pressure the greater are the chances of t occurrence

Although there is no causal relationship established betw high blood urea content and uraemia yet the two are nea always associated

**Blood cholesterol**—The increase of blood cholesterol is p bably due to some metabolic disturbance in the transportat of the lipoids and may be extrarenal Low basal metabolic r is generally associated with nephritis with oedema and nephr and may be the cause of *improper metabolism* thus an incre in blood cholesterol In cases of oedema of doubtful natur high blood cholesterol is highly suggestive of renal origin cause in oedema of heart failure cholesterol content of blood normal The high blood cholesterol associated with great depo of this lipoid in the renal tubules is probably the origin of th presence in the kidney tubules and of the excretion of the dou refractive bodies in the urine In the **third stage** of kidr disease and toxaemia of pregnancy the cholesterol content blood is normal or low in spite of the fact that in normal pr nancy the cholesterol *content of blood is raised* and that t kidney of pregnancy is of the nephrotic type and generally associated with oedema

**Normal complement in blood,** is known to be very low acute nephritis pecially in uraemia It is probably unaffect in other form of nephritis

**Anaemia** may be intense and is usually of secondary typ and may be due to interference with the synthesis of *haemogl* bin in the liver rather than due to deficient action of bone ma rows Achlorhydria or hypochlorhydria is common and th interferes with proper digestion of food and absorption of iro from the proximal part of the small intestine as slight acidity duodenum augments absorption of iron of food and other source Loss of ablumin and a poor dietary also are contributory

**Haemorrhage**—There is a peculiar tendency toward haemorrhage without apparent reason and epistaxis is one of th commonest manifestations **Pericarditis and pleurisy** may b *haemorrhagic in type Purpuric spots on the skin and haemo* rhage into the retina are not uncommon The explanation ma be in some toxic alteration in the vessel wall notably som endothelial change

**Urinary changes**—Albuminuria and casts and fixed specifi gravity etc have already been explained The haematuria i the acute stage is from the damaged capillaries of the glomerula tufts Polyuria of chronic nephritis is *probably a compensator* mechanism whereby the damaged kidney makes all efforts to do its maximum excretory function It is through the greatly increased quantity of urine that the kidney tries to make good

the loss of power of concentration and to excrete the solids specially nonprotein and others

**Superimposed infections** —All sorts of superimposed bacterial infections are common in a body with lowered resistance and infections specially of the pericardium pleura peritoneum heart valves etc are the commonest As noted by Bright in his original masterly observation pericarditis is common and may be terminal This pericarditis may be noninfective and is most likely to occur in those cases showing a high blood urea marked anaemia with a tendency to haemorrhage The exciting agent hence is probably more commonly chemical rather than bacterial in nature.

## PYELITIS

Pyelitis means inflammation of renal pelvis The renal parenchyma may show toxic alteration as a result of bacterial activity in the pelvis When there are foci of infection in the kidney substances the condition is called pyelonephritis Sometimes pyonephrosis and perinephric abscess even may follow

**Etiology** Age —Commoner in women than in men All ages are affected *in infancy commonly girls and during pregnancy adult women generally suffer* In early life and in old age males and females appear to be equally affected

**The causative organisms and the mode of infection** —The commonest organism is bacillus coli next probably is B proteus strepto and staphylo-cocci and bacillus typhosus and others

They may reach the renal pelvis by way of (1) blood stream i e **haematogenous infection** The bacilli enter the circulation from the intestines or other infected foci and thus may in the process of excretion through the kidneys in the presence of some predisposing factors mentioned below infect the renal pelvis Simple bacilluria is generally harmless (2) Infections of the lower portion of the urinary tract as from urethra bladder prostate and others by **ascending up the ureters** may cause this infection (3) By **contiguity** or through lymphatics Large intestine or other portions specially at the hepatic flexure notably in constipation may serve as a reservoir of bacillus coli and infection by contiguity is not uncommon

**Predisposing factors** —**Urinary obstruction** by such conditions as (1) stricture in the *urethra enlarged prostate* impacted stones in the renal calices growths and tumours predispose by preventing the free flow of urine (2) Pregnancy by obstructing the ureters through the enlarged uterus forms one of the common causes (3) Local kidney diseases like stones tumours renal tuberculosis hydronephrosis and others precipitate this infection by preventing a free flow of urine (4) Chronic constipation all sorts of intestinal infections like enteritis colitis appendicitis dysenteries and others might

help the infection by easy passage through direct contiguity or by lymphatics

**Pathology** —There is catarrhal inflammation of the renal pelvis and may be scattered foci of infection or small abscess in the kidney substance In severe cases the organ is swollen showing abscesses on its surface From this condition when more severe may lead to pyonephrosis or perinephric abscess

**Clinical manifestations** —Generally the manifestations may be divided into (1) general (2) local and (3) urinary finding and (4) other special examinations

(1) **General signs and symptoms** —There is fever may be with chill and rigor It might be remittent or intermittent in character Repeated rigor and sweating may mean pyelonephritis also Children may show convulsion Rapid anaemia with coated tongue and anorexia and constipation are common

(2) **Localising findings** —Pain in the loins or in the lumber a region may be with tenderness and dysuria may be with increased frequency and haematuria may suggest the true nature of the mischief An enlarged and tender kidney if palpable is highly suggestive

(3) ***Urinary findings*** —*Pale acid urine may* be with a peculiar fishy odour and usually turbid with or without deposit at the bottom may be tinged with blood are suggestive of coli pyelitis but infection by staphylococci or bacillus proteus may render the urine alkaline through ammoniacal fermentation emitting the odour of ammonia There is excess of pus cell in comparison with mall amounts of albumin **Microscopically** pus cells and leukocytic casts and renal epithelium and red blood cells may be present **Culture** of the urine drawn by cathete in women and by the same means in men but failing this carefully collected midstream urine when cultured may show the *causative organisms*

(4) **Other special examinations** —Cystoscopy or ureteral cathertensation or pyelography when done suitably under expert hands may afford valuable information

(5) **A leukocytosis** of about 10 000 to 20 000 per c mm with increased neutrophils quick sedimentation rate of the red cells may be helpful

**Diagnosis** —In the presence of localising signs and symptoms examination of the urine for pus cells and culturing settle the diagnosis The signs of constitutional toxaemia like fever chill sweating pallor when associated with leukocytosis help in the diagnosis

**Differential diagnosis** —Pyonephrosis besides showing signs and symptoms of toxaemia and manifestations of pus under pressure may show a tumour like mass which is tender and corresponds with the location of the kidney **Renal calculi**

ome after jolting or hard exertion and is paroxysmal and
lly associated with typical colicy pain and the examina
f the urine and culture and a skiagraphy of the kidney
lly help to clear up the difficulty **Perinephric abscess** in
*rlier stage does not show pyuria or frequency of micturi*
there may be a tenderness in the lumber region on pres
with symptoms of pus under pressure like chill pallo-
ng at break of fever leukocytosis and others

**Cystitis,** may follow after instrumentation or in stricture or
ethritis or prostatitis There may or may not be feve
supra pubic pain and tenderness and also discomfort in
erineum frequent dysuria and absence of findings typical
elitis are helpful

Urethritis is diagnosed by local tenderness discharge
oscopy and other examinations

**Prognosis**—When properly treated recovery takes place in
a month or longer but the urine to clear up may take
r time Relapses are common notably when the treat
i inadequate and recovery incomplete or when pred s-
g factors are not removable

**Chronicity**—Often in adults notably in women and female
en there may be fever continued for months without any
symptom except some malaise and doubtful frequency of
urition Indeterminate long fever in children young
les should prompt one to examine the urine carefully for
cells and culture the same collected through a catheter taken
aseptic measure **Relapses are notoriously frequent**
ally when there is obstruction to the free flow of the urine
ssed *under the head of Predisposing factors* mentioned
dy

**Treatment**—When acute or febrile she must be in be
kept reasonably warm She should be given plenty of
s and suitable alkaline mixtures like 20 grains each of
ssium citrate and soda acetate every few hours to keep the
e just alkaline because continued alkalinity of the urine
ents the growth of the B coli Bowels should be kept
y acting by suitable aperients

Diet should consist mostly of carbohydrates and liquids
ed milk or curd or buttermilk (ghole) may be allowed
ch helps to keep the intestinal flora in check and also act
*alkaliniser of the urine During the acute febrile stage th s*
ative line of management may be with bromides and
adonna to prevent dysuria pain and spasm may be of use
e the fever is better and urine is still alkaline sulphonamide
ally 2 gram doses and 1 gram four hourly for three days
1 1 gram six hourly for another four to five days the urine
ng kept alkaline all the while may be of use specially

against B coli and proteus *group of infections* A careful watch should be kept for toxicity caused by sulphonamides such as cyanosis crystalluria haematuria leukopenia

**In acid urine** or urine rendered acid by ammonium chloride in 20 grain doses four to six hourly and with restriction of water and the urine showing 5 to 5 5 pH may be treated with advantage by mandelic acid or its various modifications Calcium mandelate or neoket given in 3 gm doses four to six hourly for five to seven days may be very effective But they are contra indicated in the presence of nephritis or haematuria

**Hexamine or *Urotropine*,** acts as effective urinary antiseptic by the liberation of formaldehyde in acid urine After having rendered the urine acid by the means suggested already hexamine in 10 to 30 grain doses may be given three times a day orally before meals But more effective treatment is intravenous injection of 5 to 10 c c of 40 per cent urotropine solution even twice daily in persistent intractable cases for a few weeks continuously In occasional cases this treatment may produce haematuria which prompts its abandoning

Alternate alkaline and sulphonamide therapy combined with acid and mandelic acid or hexamine medication may be required in persistent cases **But in actual practice we seem to prefer the hexamine and acid line of therapy which appears more effective** **Autovaccine** injections made out of the urine culture may be of help

*Streptomycin injections one of the best if not the best* urinary antiseptic known may prove a specific but is only effective in alkaline urine Aureomycin orally has also been found useful of late But the treatment must be continued for at least for a week or longer

## PYONEPHROSIS AND HYDRONEPHROSIS

**Pyonephrosis** means distention of renal pelvis with pus It generally arises as a sequel of pyelitis or from infection of a hydronephrosis Renal calculi are one of the commonest causes Tuberculous pyonephrosis is not uncommon and generally the complication of tuberculous kidney The signs and symptoms are more or less those of pyelitis except that due to too much distention of renal pelvis there might be aches and pains in the loins with higher temperature frequent rigors sweating rapidly *developing pallor* etc There is a definite leukocytosis and the urine culture is positive On examination usually a palpable renal tumour may be felt There might be azotaemia as in chronic *pyelonephritis* Treatment is as in pyelitis but is not likely of much use Ultimately surgery with nephrectomy

provided the other kidney is normal whereas in bilateral cases treatment is purely palliative

**Hydronephrosis** means an aseptic retention of urine in the kidney or renal pelvis as a result of obstruction to the flow of urine It may be bilateral or unilateral acquired or congenital **Acquired hydronephrosis** may be due to (1) ureteral causes such as calculi in the renal pelvis or ureters thickenings torsions kinks at the pelvic junction of the ureters inflammatory masses bands from chronic pyelitis traumatic causes and strictures growths in the ureters and at its entrance in the bladder Pressure on the ureter by abdominal tumours movable kidney abdominal adhesions and bands chronic pelvic cellulitis etc uterine malignant tumours etc (2) Causes in the urethra are stones or foreign bodies prostatic enlargement stricture of the urethra pelvic tumours like enlargement of the uterus by pregnancy fibroids ovarian causes like cysts and growths etc Probably the commonest causes are impacted stones unusual mobility of the kidney causing twisting of ureters and aberrant vessels In a few cases no obvious cause may be found

Congenital causes are not common and occur usually in male infants due to congenital stenosis and septa in the ureter or urethra It may accompany developmental anomalies like horse shoe kidney or double ureters or extra renal causes like imperforate anus etc

**Pathology** —The mechanism of hydronephrosis is from the resultant effect of back pressure and hence whatever the cause partial or intermittent unrelieved obstruction to the free flow of the urine leads to the dilatation of the ureters pelvis and then the calyces and further back finally on the kidneys causing atrophy of the pyramids and ultimately the cortex of the kidney Finally the kidney is completely destroyed and is generally replaced by a sac lined with fibrous tissue consisting of the remnants of the organ When unilateral hydronephrosis does not cause any symptoms of renal incompetence because the other healthy kidney generally undergoes hypertrophy When the lesion is situated in the urethra the back pressure affects both the kidneys but the bladder acting as a preventive buffer and reservoir does not easily allow hydronephrosis of any appreciable size to develop But if this continues for a long time without relief bilateral hydronephrosis is likely Haematuria may result from rupture of a distended vessel commonly seen on the inner surface of the hydronephrotic sac

**Symptoms** —Curiously unilateral hydronephrosis is more likely to cause symptoms than the bilateral variety **Pain** generally intermittent may simulate renal colic sometime there is a continuous ache in the loin vomiting polyuria and occasionally haematuria may be noted In the later stages a

**tumour appearing intermittently** and disappearing after passage *of large quantity of limpid* urine may help in diagnosis

**Diagnosis,** is done by **pyelography** Modern method investigation by pyelography has facilitated the diagnosi growths in the kidney tuberculous lesions in the organ h nephrosis and others There are two methods usually em ed (1) *excretion or intravenous pyelography in which a r* opaque substance containing iodine is injected intraveno thus rendering the pelvis of the kidneys and the other un tracts radio opaque while being excreted thus making passages visible (2) Retrograde pyelography by which soc iodide is injected by ureteric catheterisation **In the early st** ***the characteristic flattening of the calyces suggest the diagr*** The commoner patent preparations available for intrave pyelography are Uropac (May & Baker) Uroselectan (Schering) Pyelectan (Glaxo) and Perabrodil (Bayer) W the drug fails to be excreted after intravenous injection the probable impairment of renal function In severe kidney dise in azotaemia and in damaged liver or under acute inflamma conditions this line of investigation is contra indicated

**Prognosis,** varies according to the cause and removable c are obviously better than those which cannot be remov Besides azotaemia as a result of gradual destruction of kidn epsis may cause pyonephrosis

**Treatment** is mainly surgical

## PERINEPHRIC ABSCESS AND PERINEPHRITIS

It is not unlikely that in certain percentage of cases chronic nephritis develop a nonsuppurative inflammation of perirenal tissues involved in adhesion with the renal capsu This tension might cause lumber pain about which we are li ly to be unmindful

**Etiology and Pathology —(1) Primary form** Suppurati may follow excretion through kidneys of circulating staphy cocci or other organisms from boils carbuncles tonsillitis as a complication of specific fevers or from cryptic sourc This is likely to follow in cases of local trauma or any oth cause of lowering of local resistance of the kidneys T interval between the primary infection and the perinephi abscess is usually from two to four weeks but may be aft months Besides staphylococci strepto or pneumococci ma the underlying causes (2) **The secondary form** may follo direct contiguity from suppuration of the neighbouring orga like the kidney liver gall bladder appendix etc

***Pathology*** *—As already detailed under pyelonephritis* the majority the initial lesion is believed to be in the cortex

the kidney in the form of minute abscesses which work outwards and penetrating the renal capsule ultimately reach the perinephric tissues The pus usually accumulates behind the kidney and point to the loin or may travel down the psoas muscle to reach groin or pelvis It may rupture upwards through the diaphragm to enter the peritoneal cavity or burst into the intestines or by lymphatic spread may reach the pleura to cause empyema

**Clinical manifestations**—Usually the onset is insidious and characterized by fatigue malaise light pyrexia pain in the joints etc The toxaemia may suggest typhoid fever all the more because during the first few days there may be no localising signs Occasionally there might be acute onset with rigors In the average case after a variable period of a week or longer there appears localising sign like pain in the loins or back or symptoms like lumbago abdominal discomfort pain and slight fullness with resistance round the affected loins notably in the renal region These symptoms sometimes do not develop even after months of pyrexia associated with indefinite signs and symptoms In frank cases this pain and fullness increase till a definite lump is felt on the renal region and with the formation of pus there may be induration redness swelling and oedema of the muscles and of the local surface As the pus forms it may track back obliterating the normal hollow of the loin or may track forward then the mass has resonant colon in its front but does not move with respiration There is rigidity and resistance of the abdomen in front In the base of the corresponding lung the air entry may be weak as heard on auscultation At the base of the corresponding lung tactile fremitus is generally present

**Laboratory data**—Blood shows a leukocytosis of about fifteen to thirty thousand per c m m or may be more **Urine** generally shows febrile albuminuria It does not contain pus unless the kidney itself is involved but haematuria may occur **Skiagram** may show a raised position of the diaphragm if the abscess is situated or the pus has tracked up above the kidney

**Course.**—If associated with chronic pyelonephritis it (abscess) may pass unnoticed but when tracks to various different directions *diverse symptoms and a variable course may follow*

**Diagnosis**—Once the localising symptoms have developed with leukocytosis there is suggestion of pus under pressure But in obscure cases the diagnosis becomes difficult

**Differential diagnosis**—The leukocytosis and signs of localisation differentiate it from typhoid and malaria The temperature is more likely to be hectic but may be remittent also thus simulating malaria But the typical signs and symptoms of malaria such as headache bilious vomiting icterus palpable

spleen anaemia anorexia constipation parasites in the bl leukopenia and therapeutic test by anti malarials help E carditis points towards the heart and may show murmurs may be *precordial pain etc leukocytosis above fifteen thous* is likely to be against endocarditis **Renal tumours** and adr growths may be febrile but they are not tender and tend to trude forwards and not backwards and there is lack of syste *manifestations of pus under pressure* Induration of the tis is absent Pyonephrosis does not cause any bulging in the r region and the tumour is circumscribed moves with respira and has the feel of the kidney Pyuria is generally present

In **caries spine** the pain is situated in the centre of the sp and there may be other evidences of *nerve root lesion and a sl* gram generally settles the diagnosis **Hip disease** is associa with the history of functional disturbance in the joint and neighbouring structures but no renal symptoms

***Treatment*** —*During the early stage* the bowels should kept open analgesics to relieve pain fomentation and poulti are applied locally to relieve pain and to promote pus format and once **"ripe"** the pus should be drained out If the tempe *ture and suppuration continue after the pus is drained* a re carbuncle should be suspected

The **prognosis** is usually good in the majority notably wh properly treated Combined sulphonamide and penicillin thera *a in all forms of suppuration coupled with suitable draina* may do much good During convalescence tonics good di vitamin and regular action of the bowels are indicated

## GENITO URINARY TUBERCULOSIS

Tuberculosis affects kidneys ureters bladder or the *genita organs epididymis testes seminal vesicles* prostate and the Fallopian tubes are commonly seen being affected nowadays in Indian women Occasionally the uterus and ovaries may also be affected Most of them are of surgical interest and occurs in subjects below the age of 40 years In Children it may be a part of the miliary infection

The infection of the kidneys is secondary to some other *focus in the body may be in the lung glands intestine* peri toneum and others or from some cryptic sources the bacill may also be carried by the blood stream The initial focus is either at the apex of the papilla or at the base of the pyramid *The renal pelvis* is early infected A progressive caseation and cavitation gradually destroys first the medulla and then the cortex until finally the kidney is converted to a multilocular sac filled with thick *tuberculous pus At all stages tubercles are* found under the capsule Hydro and pyonephrosis are not uncommon along with this lesion

It causes clinically a fibrocaseating form of the disease o tuberculous hydronephrosis and usually the disease is primary n the kidney whence it might spread via ureter to the bladder and/or as an ascending periureteral lymphatic affection to the other kidney but more commonly this infection spreads by para aortic lymphatics

**Clinical Features**—Commoner in females than in males usually between 30 to 40 years of age and uncommon in young and rare in the old

A careful history generally reveals **prolonged indifferent health** and when associated with suggestive manifestations the *probabilities of renal lesion by tubercle bacilli should be remembered* The onset is generally insidious with aches in the loins **frequency of micturition at first by day later by night** Next follows painful urgency to pass urine and **sometimes haematuria** may be present

**Constitutional symptoms** like fever may or may not be present Some anaemia and wasting are generally noted Sweating may be present in patients having associated advanced pulmonary tuberculosi

**Localising signs and symptoms**—Aching and tenderness in the loins suggesting the probable site of mischief **Haematuria and polyuria** may draw the attention The kidney might be irregularly enlarged and often tender Tenderness or thickening of the ureters may be palpated rectally and when considerably thickened may be felt through the abdominal muscles The prostate when affected may be felt to be enlarged and tender There may be evidenc of tuberculous disease in other parts of *the body*

**The Urine**—Though haematuria may be the first indication yet the urine is as a rule pale opalescent or slightly turbid due to pus cells and is acid in reaction and sterile to culture There is only slight albuminuria Centrifused deposit of the urine may how tubercle bacilli on staining in the smear Suitable culture *for the tubercle bacilli* or injection into guinea pigs show positive results suggesting tuberculosis

**Cystoscopy** may show shallow ulcers or submucous tubercules in early vesical lesions Ureteroscopy may show the ureteric orifices to be swollen or oedematous or they may be thickened retracted or partly calcified **Pyelography** may show irregularity and lack of defining shadow of the calyces

**Diagnosis**—Presence of tubercle bacilli and pus cells in the urine are suggestive when in association with suspicious clinical history The possibility of renal tuberculosis should always be remembered in hydro or pyonephrosis From nephritis it is distinguished by the presence of pus in the urine and the absence of signs and symptoms of chronic neph itis Patients with pul

spleen anaemia anorexia constipation parasites in the bloo leukopenia and therapeutic test by anti malarials help *Endocarditis* points towards the heart and may show murmurs an may be precordial pain etc leucocytosis above fifteen thousan is likely to be against endocarditis **Renal tumours** and adren *growths may be febrile* but they are not tender and tend to pro trude forwards and not backwards and there is lack of system manifestations of pus under pressure Induration of the tissu is absent Pyonephrosis does not cause any bulging in the ren region and the tumour is circumscribed moves with respiratio and has the feel of the kidney Pyuria is generally present

**In caries spine** the pain is situated in the centre of the spin and there may be other evidences of nerve root lesion and a kia gram generally settles the diagnosis **Hip disease** i associate with the history of functional disturbance in the joint and th neighbouring structures but no renal symptoms

**Treatment**—During the early stages the bowels should b kept open analgesics to relieve pain fomentation and poultice are applied locally to relieve pain and to promote pus formatio and once **"ripe"**, the pus should be drained out If the tempera ture and suppuration continue after the pus is drained a rena carbuncle should be suspected

*The* ***prognosis*** *is usually good in the majority notably* wher properly treated Combined sulphonamide and penicillin therapy a in all forms of suppuration coupled with suitable drainage may do much good During convalescence tonics good diet vitamins and regular action of the bowels are indicated

## GENITO URINARY TUBERCULOSIS

Tuberculosis affects kidneys ureters bladder or the genital organs epididymis testes seminal vesicles prostate and the Fallopian tubes are commonly seen being affected nowadays in Indian women Occasionally the uterus and ovaries may also be affected Most of them are of surgical interest and occurs in subjects below the age of 40 years In Children it may be a part of the miliary infection

The infection of the kidneys is secondary to some other focus in the body may be in the lung glands intestine peri toneum and others or from some cryptic sources the bacilli may also be carried by the blood stream The initial focus is either at the apex of the papilla or at the base of the pyramid The renal pelvis is early infected A progressive caseation and cavitation gradually destroys first the medulla and then the cortex until finally the kidney is converted to a multilocular sac filled with thick tuberculous pus At all stages tubercles are found under the capsule Hydro and pyonephrosis are not uncommon along with this lesion

**Colour etc** —**Uric acid stones** are brown hard and may be irregular

**Calcium oxalate stones** are dark and irregular the dark colour is probably due to blood as they cause easy haematuria by their piky form and irregular surface which can easily injur and cause haemorrhage

They might be mixed with phosphates or urates etc **Ammonium urate calculi** are hard and brownish **Triple phosphate tones** are rather soft smooth mixed or laminated alternating with different layers with generally a nucleus of uric acid with pho phatic coating

**Cystin stones** are soft yellow green and readily laminated **Xanthin** stones are reddish brown **Indigo stones** derived from indol are extremely rare **Calcium carbonate** ones are smootl hard and dark grey

**The Effects** —A stone in the pelvis of the kidney may cau e (1) **Ultimate atrophy of the renal tissues** by obstruction, as continuous and perpetual obstruction to the flow of the urine generally results in renal atrophy (2) By **eroding through the capsule** of the kidney may produce a **fistula** into the perinephric tissue and may ultimately result into a perinephric abscess (3) By **intermittent obstruction** to the outflow of the urine may cause hydronephrosis and more commonly **pyonephrosis** may be with **ultimate atrophy of the kidney** to a thin layer (4) **Ulceration and thickening of the ureters** and of the kidney may form into a mass which may go up to calcification

**Clinical manifestations** —Commoner in males between the ages of 20 to 45 Poor children nourished on improper diet notably with lack of vitamins are common subjects In adults edentary habits or long rests in bed in the treatment of fracture abuse of alcohol or chronic lead poisoning in the patient s history are helpful

The symptoms may be caused (1) **mechanically or by** (2) **sepsis or** (3) **by their combined effects.**

(1) **Mechanical effects** —A stone situated in the substance of the kidney may remain entirely latent without any symptom Pain increased in jolting riding and on hard exertion and **haematuria with albumin in the urine may be suggestive** Rough small oxalic acid stones might produce greater pain than a large mooth uretic one Obstruction to the flow of urine by a calculus may cause pain in the loins probably by stretching of the renal capsule likewise distention of the ureters cause pain in ureteric calculi

**Colic** —After horse or bus ride cycling or walk over rough path usually initiates pain which may be agonising shooting down the groin to the testes or tip of the penis in the course of the genitocrural nerve and the scortal skin is retracted This pain is probably due to spasm of the renal pelvis and ureter

*monary tuberculosis are more prone to focal lesions in the kidneys than others*

**Course**—*The onset is insidious and the course progressive and natural healing is unlikely The course may run up to 10 years or longer Death may result from toxaemia azotaemia* or other causes.

**Treatment**—When the lesion is unilateral the question of removal of the diseased organ should be seriously considered It is hardly justified in bilateral disease The other lines of management are raising of general resistance as in pulmonary tuberculosis Injections of small doses of tuberculin in the absence of pulmonary lesion may also be tried Streptomycin injections may be tried also but said to be not of much use

## URINARY CALCULI

**Definition**—Stone in the kidney ureters bladder or in any other part of the urinary tract

**Etiology**—Infection of the urinary tract stasis too much concentration by evaporation or very little fluids drunk the character of the drinking water presence of irreversible colloid like fibrin which once precipitated will not go into solution too much acidity in cases of oxalic acid and uric acid stones or alkalinity in phosphatic stones deficiency of vitamins A by changing the character of the epithelium of renal tissues mostly of tubule (epithelial metaplasia) too much indulgence in cereal diets with avitamonosis specially of A vitamin and in rare cases of injudicious treatment of gastric and duodenal ulcers by too much restricted diet causing deficiency and others are some of the factors in the productions of urinary calculi In India it s common in certain areas where people take mostly cereal diets with a deficiency of vitamins as is seen amongst the seamen in certain coastal districts of East Bengal Parathyroid tumour may help by hypercalcaemia It appears to be more common in certain persons with improper metabolism with oxaluria and other troubles than in normals The female urethral canal being shorter but wider allows the easy passage of small calculi

**Pathology**—Two factors are required for the formation and growth of a calculus they are crystals from the urine and some colloids for cohesion Hence not uncommonly the nucleus is formed by bacteria or colloid debris or fibrin in oxaluria co existing albuminuria or even haematuria help by providing the necessary colloids **Primary calculi** are said to form in urine without any bacterial inflammation

**Secondary calculi** are deposited in alkaline urine infected with bacteria thus phosphatic crust may be formed around a uric acid nucleus Their size varies from that of a small granule to the size of a ping pong ball or a small hen s egg

Skiagram of the urinary system shows oxalate stones be Unless calcified the uretic and cystin stones are not generally visible because they are not radio-opaque Calcified lymph glands and phleboliths are confused with calculi but in doubtful cases pyelography is of much help notably to localise stones As has already been mentioned under oxaluria a very frequent condition in Indian practice is usually associated with haematuria and colic The skiagram is negative and urinary deposits seen under the microscope reveal the oxlate crystals

**Appendicular colic** is at a fixed point without radiation and generally with gastro intestinal manifestations there may be fever neutrocytosis and others

***Course and complications*—*Course*** *is variable sometimes* may be more or less a life long ailment Complications may be colic, which may be also manifested by pyelitis pyonephrosis pyelonephritis and cystitis (2) A stone by partial obstruction may cause hydro or pyonephrosis ultimately leading to renal atrophy In acute colic there may be calculus anuria probably a reflex phenomenon (3) Ulceration through the ureters or a stone in the substance of the kidney may ulcerate out causing perinephric abscess fistulae and others (4) Rarely malignancy may supervene

**Prognosis**—Unless there is sepsis and serious damage to the kidneys with atrophy by obstruction the outlook of life is good provided proper treatment is instituted in time Renal colic if *repeated may cause miserable suffering Stones may be* followed by sepsis rarely also by nephritis

**Treatment**—Stones may be passed spontaneously when small specially in women During colic it may be relieved by hot full immersion bath and also by local application of warmth by hot water bottles to the loins hot poultices over the loins may be of use by relieving the pain

Hot drinks of various sorts like barley water weak tea ordinary water etc may be of relief Failing the above and when *the intensity of the pain is unbearable morphine sulphat* one fourth to one third grain with one hundredth grain of atropine sulphate should be given subcutaneously and repeated every six hourly if required But generally one such injection is *adequate in the average case*

**In between attacks**—The patient should lead a quiet life avoiding sudden exertion jolting rough rides etc and drink plenty of water If the urine is acid it is better to make it neutral to litmus paper by alkalies and a prescription like the following *may be useful* Potassium citrate and acetate 15 to 20 grains each with tincture belladonna six to eight drops and potassium bromide 10 to 15 grains syrup 1 dram to make up to one ounce by water One dose three or four times a day accord

There is usually a sense of nausea and vomiting and the patie looks pale or flushed with sweating and tosses in bed or cold floor to get relief *The very frequent urgency for mictu tion might produce no urine but a drop of blood of urine mixe with blood* The duration may be from a few minutes to a fe hours or longer The pain may be referred to the healthy kic ney a point worth remembering in surgical cases intended fo removal

**On examination** there may be abdominal rigidity on th affected side The *main symptoms of **vesical calculus** are attacks o spasms of pain felt at the end of the penis at the end of mictu tion radiating to the perineum and inner side of the thigh* There might be frequency of micturition and cystitis Uraemi manifestations may be encountered in bilateral renal calcu *with destruction of renal tissues*

**Investigation** **Skiagram** of the whole urinary tract with or without injection of radio-opaque substances mentioned alread for **pyelography** and **microscopical examination** of the centri fused deposits of the urine may help in the diagnosis The cul ture of the urine may also be useful In bladder the stone may be silent and the symptoms very little or may cause haematuria obstruction to the flow of urine or as said already pain afte micturition with characteristic radiation etc

**Diagnosis and differentiation** **Haematuria and colic** su gest renal calculus The passage of blood clot in renal **neoplasm** or sometime in **acute pyelitis** may cause these symptoms. But the slow course of the tumour without any relation to jolting or exercise and gradually progressive course might help in differ entiation In pyelitis the fever may be with rigor pus and positive culture of the urine leukocytosis help to differentiate

**Biliary colic** generally comes at night at rest after heavy fatty meals may be in subjects of constipation the pain may be referred to the right shoulder following this there may be *jaundice and a skiagram of the biliary passages* and gall bladder may also help to differentiate notably when *the stones* are radio opaque **Intestinal colic** has not the characteristic radiation and is spasmodic in character with variations in intensity and lacks the haematuria and the onset after jolting exertion etc Intestinal colic may be relieved by pressure of the pillow or by passage of wind or after *evacuation of the bowels* **Dietl's** *crisis* though un common may be difficult to diagnose But the history of a movable kidney colic with anuria or oliguria manifesting a big mass in the kidney region and subsequent passage of large quantity of urine with the disappearance of the mass is suggestive *Rarely a **tabetic crisis*** may cause difficulty but the Argyll Robert son pupil Rhombergism loss of tendon reflexes gait etc will help

**Fibromata** appear as nodules sometime multiple in the cortex or medulla Lipomata and angiomata producing haematuria pain etc are rare

## MALIGNANT TUMOURS

These are of two forms (1) Sarcomata (2) Carcinomata (1) Sarcomata are more often bilateral than Carcinomata and may arise from the substance or capsule of the kidneys and may be of spindle or round cell type

The embryonal adenomyosarcomata (Wilms tumour) are remarkable in containing glandular fibrous muscular and embryonal tissues These solid and opaque tumours may lie under the distended renal capsule Large ones often undergo cystic degeneration

**Clinical manifestations**—Sarcomata are more common in infants which grow rapidly to a large size and a fatal course Metastasis to other organs and rarely to the liver are not common

(2) **Carcinomata Hypernephroma**—The erroneous idea of Grawitz (1883) that these are from adrenal cortical rest in the kidneys was proved by Wilson (1910) to be a renal carcinoma arising either from tubules in adults or as suggested by Wilson from islets of nephrogenic tissue persisting in the renal cortex in children thus bringing these into the line with embryoma

They are large single and well circumscribed on section yellowish fatty and vascular hence prone to haemorrhage nephrosis and cystic degeneration Metastasis into large bones such as tibia vertebrae and in lungs liver and brain may be found The bony deposits are very vascular

**Adenocarcinoma** is likely to be confused with hypernephroma because their appearance growth and metastasis are more or less the same as in hypernephroma

**Clinical manifestations**—If the subject is a child the growth is commonly either sarcoma or hypernephroma He is pale weak wasted and swollen

**The tumour**—Presence of a rounded mass in the loin enlarging downwards and backwards filling the hollow of the twelfth rib later on extending towards the middle line dulness on percussion extends to the flanks with a band of colonic resonance running across it There is very slight movement on respiration

**Haematuria** is the first symptom in about 50 percent of all cases of this tumour

**Diagnosis**—In adults the important symptoms are haematuria pain and loss of weight but a hypernephroma may be small and thus may not cause any symptoms at all or may be

**Diagnosis** —The typical contour consistency and the position etc of the organ and moving during deep inspiration are helpful in the diagnosis of mobile kidney A **Riedel's lobe** from which it may be confused with has generally a continuity with liver, so also has a **distended gall bladder,** and this continuity with the liver may easily be ascertained by palpation percussion situation consistency etc The gall bladder is not nearly so movable and is more globular at its end and much more superficial Occasionally **carcinoma of the pylorus** is differentiated by presence of occult blood in the stool testmeal and skiagraphy **Scybala** have not the consistency mobility size of the kidneys Their shape is variable and moreover effective enemata or purges make them disappear

**Course and Complications** —The course is very variable specially when associated with generalised splanchnoptosis Complications like intermittent hydronephrosis pyonephrosis calculus formation pyelitis adhesion with neighbouring organs may be encountered If there is a fistula with bile duct which is rather rare jaundice may follow

**Prognosis** —Apart from the tendency towards the above complications and risks of Dietl s crisis there is not much danger to life But the chronic ill health with vague drags and pains may make the patient miserable It is doubtful if a kidney once dropped can be put in its place unaided

**Treatment** —The patient should not be informed of the movable kidney if discovered accidentally in routine examination The pain may be relieved by knee elbow position or by raising the foot end of the bed A kidney belt or lower abdominal support thus raising the diaphragm and bracing the abdomen may do variable good Breathing exercise and massage might be tried Operations for pain etc are seldom of lasting effect For the other points the chapter on splanchnoptosis should be consulted

**Dietl's crisis** —Put the patient to bed apply warmth cataplasma kaolini on the affected side may apply a warm bath Subcutaneous injection of one fourth grain of morphine and one hundredth grain of atropine sulphates may have to be given If the condition lasts longer then manual replacement under anaesthesia may have to be tried Later on the question of nephropexy should be seriously considered in consultation with a competent surgeon

## TUMOURS OF THE KIDNEY

**Benign Tumours** —These are of little significance Adenoma of the cortex or under the capsule are the commonest They may be single or multiple the latter type occurs in old people with sclerotic kidney

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**Diagnosis**—*In adults the important symptoms are haema* ia pain and loss of weight but a hypernephroma may be all and thus may not cause any symptoms at all or may be

large enough to cause inconvenience Uroselectan pyelography may reveal the nature of the disease in a kidney In the male the presence of varicocele for the first time in a middle aged person not disappearing on lying down is very suggestive of renal tumour specially if located on the right side

A secondary deposit on the tibia at first shows a reddish brown discolouration of the skin then comes a palpable bony swelling which on enlarging may be pulsatile In haematuria one should try to ascertain exactly whence the blood is coming

**Prognosis** —Death follows in one to two years from the date of diagnosis Rarely the patient may live longer

**Treatment** —Only radical surgical treatment holds out some prospect of cure Symptomatic treatment includes use of drugs to relieve the pain and to control the haematuria

## POLYCYSTIC KIDNEYS

### (Congenital cystic disease of kidney)

It is usually bilateral though one kidney is more affected than the other and is often familial In England it is a comparatively common congenital anomaly occurring in about one in six hundred autopsies Generally the patient dies either in childhood or in middle life Sometime the liver and pancreas also show similar cystic degeneration The cysts vary in number and size and has a tendency eventually to destroy the normal structures of the kidneys and thus cause death from azotaemia and uraemia The condition may remain latent except that occasional attacks of haematuria when investigated may reveal enlargement of the kidneys The manifestations of renal insufficiency indicated by high rise of urea content of blood for months and years without other signs of renal failure and accompanied with a rise of blood pressure at th later stages are highly suggestive

**Diagnosis,** is made by the history of attacks of haematuria and presence of enlarged kidneys which might be irregular and cystic to the feel but the characteristic pyelographic appearance confirm the diagnosis **Prognostically** being a progressive condition the ultimate result is generally fatal **Treatment** consists in making the patient live within the limits of the excretory power of the kidneys He should be careful to avoid cold and chilling specially of the loins etc

# DISEASES OF THE CARDIOVASCULAR SYSTEM

**In the following chapters diseases of the pericardium, heart, ;ries, veins and others are discussed**

**For proper investigation** of a heart patient a tracing of pulse (sphygmogram) and polygraphic tracing estimation blood pressure skiagram of the chest for the size of the hear l at times an electro-cardiographic tracing may be essential t for an average case all these are not required Only a car history and routine examination by inspection palpation cussion and auscultation are all those generally required

For diagnosis of diseases the actual size of the heart is of me importance for this purpose a teleradiogram or an ortho gram appear of service

**Teleradiogram** is a skiagram of the heart taken with a e the patient at a distance of six feet (about 2 meters) so t practically no distortion of the heart shadow is possible

**Orthodiagram,** a small beam of ray is made to work at th lines of the heart and its edges are delineated with a pencil the screen or on a piece of paper This marking is done ring expiration of the chest and at the diastolic phase of h art

**Posterior cardiac space calcification etc**—Sometime th eral view on the X ray screen will give ideas as to the altera n of the size and shape of the heart as a whole and also of individual chambers and of the aorta Any calcification eurysm erosion of the ribs enlargement of chambers and ier abnormalities are also thus detectable

(1) L D—Long diameter from the apex to the junction the right auricle and ascending aorta—varies normally 11 5 to c m usually 13 2 c m

(2) R M—*Right medial and* L M—*left medial* ar stances from the middle line to the right and left borders of e heart respectively the mean for an average adult is 4 2 and 5 respectively with a (3) total mean transverse diameter M & L M—12 7 with a variation of about 9 5 to 14 5 c m

Index of auriculo ventricular ratio varies from 0 53 to 0 7 is again in ventricular (enlargement) preponderance 0 2 and iricular preponderance about 1 2 Normal left ventricle 7 to 8 5 c m Left auricle 3 5 to 5 c m and so on

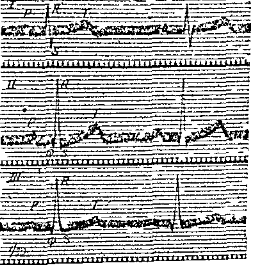
**Cardiothorasic ratio** is the normal ratio of the transverse ameter of the heart to the internal diameter of the che t

$$\frac{\text{T D = Transverse diameter of heart}}{\text{T H = Transverse of internal thorax}} = 1$$ in a normal individual ut in hypersthenic individuals it is 1 to 1 9 in hyposthenics ay be upto 1 to 4

## THE ELECTROCARDIOGRAPH

Einthoven (1903) made his extremely sensitive galvanometer on the principle of a fine metal plated squartz fibre or string (2 m in diameter) suspended in a powerful magnetic field Any movement of the fibre magnified several hundred folds are photographed on a moving film or plate The position of this string at a particular moment moves in relation to the electrical current flowing through it at that specific time It is a well known fact that muscular contractions cause variations in electrical potential This principle is utilised to record the changeable electric potential during the contraction of the various chambers and the muscles of the heart and these lines of deflection from the basis of electrocardiography and follow closely the course of the excitatory waves caused by the contraction of the myocardium **By connecting the fibre to different two points on the surface of the body it is possible to obtain well marked and characteristic deflections of the string with each contraction of the heart and these are called leads**

**Lead I**—The common leads are connecting the right and the left forearm (Transverse) **Lead II,** connecting right forearm and left leg (axial) **Lead III** connecting left forearm and left leg (Left lateral)



Normal electrocardiogram

Recently two mere chest leads e g IV L connecting a precordial electrode placed at the outer border of the apex of the heart and the right forearm Lead V L cor

necting a precordial electrode and the lef fo earm have be added

This instrument is recently in extensive use but seldo affords valuable information in valvular diseases but clears t mysteries of obscure arrhythmias and others In suspect myocardial disease notably in the elderly and in all cases precordial pain on excretion or not electrocardiographic fin ings may afford valuable information

**Normal electrocardiogram** —The small deflection called P ssociated with the contraction of the auricles and the defle tions QRST represent ventricular *complex* The interv between the initiation of the P wave and the summit of the R regarded as the time taken for the wave of excitation to trav from the S A (Sino Auricular) node to the ventricular muscl Normally this **P R *interval is related to the capacity of* condu tion of these conducting systems and should not exceed 0** econd

*Summary of the significance and character of the waves* different leads *in health and disease*

**P Wave** —This results *from* auricular contraction (com plex) In almost all the leads it is upright and *not sharp* an varies from 1 to 3 mm in amplitude and has a maximu *duration of* 0 1 econd Hence for obvious reasons a large wave is indicative *of auricular hypertrophy* Inverted P wa generally indicates its origin outside its normal S A *node hen* in auricular fibrillation where electrical waves are irregular an originate from different places the P waves are naturally placed by *irregular small and very* rapid oscillations and th ventricular complex also being irregular the QRS deflections a extremely variable But in auricular flutter or paroxy m tachycardia rapid but regular and two to four times more fr quent P waves *due to all the P* impulses not being responde to by the ventricles (block) the QRS complexes *may* be ha or one third or one fourth and that depending on the natu and degree of the auricular waves and the capacity of th ventricles to respond *to such* rapid stimuli are noted

**QRS Complex** —These three waves occurring *in quick su* cession of each other are the resultant of ventricular contractio The Q wave is a slight downward deflection from the iso-ele tric line and may be *absent normally* It is followed by sharp sudden upward deflection the summit of which is mark as the R wave and bottom of this completed deflection is th S wave *and may* not be constantly present Out of all the waves R is of *maximum amplitude. This whole* complex nee not exceed 0 1 second The QRS deflections are followed b an *iso-electric* period called S T interval In the first and thi leads the QRS waves are normally of smaller altitudes than

the second lead In gross myocardial disease these deflections are of very short amplitude and are suggestive **of low voltage** generally diagnostic of severe myocardial disease dilatation of the ventricles and also are met with in constrictive pericarditis and excess of thyroid activity When the R wave at its tip instead of being sharp and clear cut is found to be blurred or to have thickenings or in presence of several deflections indicate myocardial fibrosis or degeneration may be with some intraventricular block

These complexes are abnormal under (1) **extra systole or ectopic beats** when such abnormal complex interpolates a series of normal complexes (2) **Intraventricular block shows** abnormal complexes regularly in each heart beat following a normal P wave but with delayed conduction (3) **Ventricular paroxysmal tachycardia** shows abnormal complexes in very rapid succession and that independently of the P waves

**P R interval, should normally not exceed 0 2 second mentioned already** This is **prolonged in the early stage of the heart block** (partial heart block) but later on according to the origin of the impulse not only the interval varies but also the P waves at times may be inverted when impulses travel in reverse direction **In complete heart block,** where the ventricle if near about or between 30 to 40 there is no constant relation between the P waves and the QRS complexes because the ventricle usually does not follow the dictates of the auricular contraction hence the PR intervals are very variable so also may all the complexes vary according to their site of origin and course taken etc

**T wave** is probably due to the final cessation of the cardiac impulse Normally it is a broad wave of 3 to 4 mm in amplitude with a duration of about 0 2 to 0 3 second except in third lead where it might be inverted is upright in all other leads and is somewhat flat Inversion of T wave generally occurs in coronary thrombosis coronary sclerosis with insufficiency When the infarction affects the apical area of the heart the T wave in lead I is inverted but upright in lead III Under digitalisation or in myocarditis mostly due to infection or in sub thyroid conditions the T wave may be inverted in all the leads

In ventricular extrasystoles and in intraventricular block the T wave is usually in opposite direction of the main *QRS* complex In chest leads the T wave is inverted in coronary thrombosis or in coronary insufficiency

**S T sector**—This is usually an isoelectric period between S and T **waves** Sometime this portion does not touch the isoelectric line (high take-off) at the early stages of coronary thrombosis After a few weeks it tend to become norma

though the T wave change already mentioned tend to persist longer In apical infarction ST is elevated in lead I and is depressed in lead III whereas in basal infarction the changes are more or less reverse of those mentioned already in leads I and III This segment (S T) is also depressed in all leads under digitalisation

**Axis deviation or the old terminology of left or right ventricular preponderance**—In cases of **left axis deviation,** the deflections of the QRS complexes are opposite from each other in the first and third leads i e in lead I the deflections are normal and as usual above the isoelectric line whereas in the third lead it is below the isoelectric line with its maximum down below In case of **right axis deviation** on the other hand the maximum deflection of QRS complex in lead I is downwards but is upwards in lead III A marked left axis deviation generally indicates that there is hypertrophy of the left ventricle (left ventricular preponderance) likewise a right axis deviation generally means hypertrophy of the right ventricle (right ventricular preponderance) The position of the heart and the diaphragm may also sometime suggest this axis deviation when the diaphragm is raised causing the heart to assume a transverse position and may show a left axis deviation likewise a more vertical heart with much lowered diaphragm will usually indicate right axis deviation

The diseases are dealt under (1) **disorders of rate and rhythm** (2) **diseases of the pericardium** (3) **myocardium** (4) **endocardium and so on**

## DISORDERS OF RATE AND RHYTHM OF HEART

### (Disorders of neuromyocardium)

Normally the impulses arising from the sinoauricular node at the junction of the superior and inferior venacava at the right auricle cause waves of excitation to spread over both the auricle to the auriculo ventricular node situated at the posterior and right edge of the interauricular septum thence spreading through the bundle of His to both the ventricles There are two systems of nerves innervating this *sensitive mechanism* vagus whose stimulation slows and sympathetic when stimulated causes quickening of the heart rate Normal cardiac action is mainly under the *sinus rhythm*

Though for simplicity the cardiac arrythmias have been classified under the following heads yet it is not always possible to point out the site and type of trouble giving rise to them Some of these are to be called functional as no detectable structural change is discoverable and sometimes combination of structural and functional alterations are not rare

I Sinus Disorders, (a) simple tachycardia (b) simple bradycardia (c) sinus arrhythmia

II Increased neuromuscular irritability (a) Extra systoles or ectopic beats (b) paroxysmal tachycardia (c) auricular fibrillation (d) auricular flutter (e) ventricular fibrillation

III Diminished or Depressed conductivity (a) Heart blocks of different types

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# DISTURBANCE OF RATE

## Simple tachycardia

**Etiology**—This may be **physiological** as after exercise in nervousness during emotion and others or in **toxic conditions** like fever thyrotoxicosis **chronic infections** like tuberculosis ...psis in alteration in **quality and quantity of blood** as in anaemia haemorrhage in **paralysis of the vagus** by belladonna atropine or in stimulation by tea coffee alcohol **Sympathetic stimulation** by adrenalin and others. In **neurasthenia** and **vasomotor instability** also the pulse rate may be quick

**Clinical manifestations**—The pulse rate at rest varies usually from 72 to 90 or more per minute **After exercise,** say going up and coming down 25 to 30 flight of stairs or after rapidly sitting up and down 10 to 15 times causes the pulse rate to quicken up to 120 to 1 0 per minute and this takes near about 2 minutes normally to come to the original According to the time taken to come to the original rate and also according to the signs and symptoms of distress experienced by the person the test is said to be good fair or tolerable and poor **effort tolerance** In other instances the patient may complain of palpitation of the heart or there may be throbbing of the head and the neck giddiness buzzing in the ears etc A sense of oppression or slight tightness in the chest or pain on the precordium may also be complained of On examination no abnormality may be detected In some cases of primary cardiac overstrain the heart may be a little enlarged and a systolic soft apical murmur may be heard

**Treatment,** should be according to cause Digitalis by itself is not indicated unless there is circulatory inadequacy Sedatives like bromides barbiturates for sleep good vitaminous diet iron tonics may be useful Special search and investigation should be made to find out the commoner causes like focal sepsis dyspepsia indigestion pulmonary tuberculosis thyrotoxicosis and others

**Simple bradycardia or sinus bradycardia**—Simple or sinus bradycardia has got to be distinguished from bradycardia of heart block to be described later on

It may be physiological in certain persons probably vago tonics in old age the pulse rate is lesser than normal in some adolescents and healthy tall athletes after convalescence from typhoid fever and during influenza dengue etc It is common in starvation nervous exhaustion in raised intracranial pressure such as meningitis cerebral haemorrhage abscess tumours etc In myxoedema jaundice uraemia in vasovagal attacks over dose of digitalis myocardial degeneration and other conditions

**Clinical manifestations**—The pulse and apex beat usually are 40 to 60 per minute Atropine and adrenalin injection usually increases the rate thus differentiating from heart block Electrocardiogram shows no block and also there may be quickening after physical exercise

**Treatment**, should be according to the underlying cause Simple physiological bardycardia need no treatment

# DISORDERS OF RATE AND RHYTHM OF HEART & PULSE

## 1 SINUS ARRHYTHMIA

**Synonym**.—Physiological or juvenile irregularity of heart

**Etiology**—This condition is normally met with in children adolescents and less commonly in young adults It may also be found in convalescence from febrile illness It appears to be vagal phenomenon with release of vagal action during inspiration

**Clinical manifestations**—The pulse during inspiration becomes quicker than during expiration This arrhythmia generally causes no symptom and when discovered during routine physical examination of the young person should not be mistaken for some serious trouble It is most noted when the patient takes a deep breath If the heart rate is quick as during physical exercise this arrhythmia tends to be less apparent Electrocardiogram shows the alteration to be due to variation in the duration of the diastole of the heart

**Prognosis** is good

**Treatment**—As sinus arrhythmia has got no pathological significance so no treatment is indicated

## 2 EXTRASYSTOLE

**Synonyms**—Premature systoles ectopic beats

**Definition**—Interpolation in the normal sinus rhythm of premature contractions with impulse originating from any other cardiac focus except the sinoauricular node

It is commoner in men than in women and is more frequent in some myocardial change than in valvular disease and about 70 percent are ventricular in origin It is a common condition causing cardiac arrhythmia

I Sinus Disorders, (a) simple tachycardia (b) simple bradycardia (c) sinus arrhythmia

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*Significance* by itself they are without significance and generally found without organic heart disease In association with other signs and symptoms of organic heart disease the significance depends on the associated lesion Coupling of beats under digitalis indicates stoppage of the drug

**Diagnosis** —The interpolation of beat in normal rhythm is highly suggestive Distinction between auricular or ventricular extrasystole is not very difficult In ventricular variety there is a compensatory cause and a bigger beat follows this and as usually where a normal beat should have been is usually missing

**Differential diagnosis** —Auricular fibrillation is usually associated with some failure symptoms and the pulse is more irregular the rate of the apex beat is as a rule greater than the pulse rate and the blood pressure when being taken varies from beat to beat But in spite of all these it may be difficult to distinguish it without an electrocardiogram But in fibrillation generally seldom two beats are alike

**Partial heart block** —The pulse rate may not be appreciably increased by physical exertion in incomplete heart block whereas in extrasystole it (pulse rate) may increase During auscultation in heart block at the time of pause in the pul there is silence whereas in premature beats there is weak contraction of the ventricle which might not have been strong enough to open the aortic valve thus cause a pul e at the wrist

**Course,** is variable and may pass off for good without occurring any more in life

**Prognosis** —Premature contractions in young people without any organic heart lesion may be overlooked but in later life specially when associated with evidences of cardio vascular disease usually means some myocardial change and the exact nature degree and extent need imperative investigation Other points have already been given under significance

**Treatment.**—By itself extrasystole requires no treatment When associated with other manifestations of heart disease the treatment of the original condition giving rise to the extra systoles demand proper care In an average case when the symptoms are distressing besides reassurance and explaining the simple nature of the trouble one may give digestive medicines when due to flatulence etc Proper regulation of the bowels adequacy of B vitamin complex and bromides and other sedatives and allaying of the anxiety may be all required Big doses of potassium acetate in 30 to 60 grain doses three or four times a day have been found useful probably by depressing the hyperirritability of the heart Quinidine in two to three grain doses thrice a day may be of some use

**Etiology**—The premature beats are generally due to u due excitability of either the auricle auriculo ventricular nc or of the ventricle are called respectively auricular or nodal ventricular extrasystole It may occur (1) in healthy indi duals commonly in young adults without any evidence cardio vascular disease but may be excited by indigestic exhausation wories under abuse of tea, tobacco etc Too mu chewing of betel with raw tobacco leaves associated with dy pe sia has been the cause in a few persons of both the sexes ( In myocardial change due to infections like rheumatic fev diphtheria *influenza pneumonia etc* (3) *Chronic hea* conditions like (a) coronary disease causing sclerosis of t myocardium (b) Hypertensive heart disease (c) Chronic syph litic or rheumatic heart disease (4) Occasionally under dig talis and quinidine poisoning and sometimes treatment und aconite or during coal gas poisoning

**Mechanism**—Extrasystole indicates greater excitability some portion of the myocardium below the sinus to be mo excitable than the pace maker itself thus it may be due some structural damage of the myocardium or due to son hyper excitability may be by an undetectable toxin not ad quate to cause structural alterations

**Clinical manifestations Subjective**—The patient ma complain of nothing and remain quite unconscious of the extr systoles But generally he has a sensation of either sudde thumping or may miss a beat or have palpitation of the hear these are particularly noticed by the patient when he is in be or is resting or is at leisure

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On auscultation of the apex a premature and weak con traction will be heard at the moment the beat is missing or th pulse is weak at the wrist The extrasystoles may come ir quick succession causing a gro s irregularity or may be occa sional and few and far between When one follows a norma beat systematically one may get pulsus bigeminus or when tw together of extrasystoles with a normal pulse pulsus trigeminus and so one Often a simple pulse tracing or sphygmogram may clear up the diagnosis but an electrocardiogram may reveal the typical or exact ectopic origin of the impulses

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**Electrocardiogram** shows regular rhythm with quick rate and the ventricular complex is normal in this variety and the P wave not originating from the sinus may be inverted in lead II and III and modified in lead I In the ventricular variety the QRS complex is of abnormal type like those of premature beat originating from abnormal sites There may be in some cases regular P waves not responded to by regular ventricular contractions notably when the auricular rates were very high

**Diagnosis**—The sudden onset of difficulty and the abrupt onset of quick rate of pulse may be with a history of similar previous attacks may or may not be with failure symptoms and not influenced by lying down suggest the diagnosis

**Differential diagnosis**—In simple tachycardia change of posture or cessation of physical exercise influence the rate of pulse and the symptoms abate and they (symptoms) are usually not so urgent as in cases of paroxysmal tachycardia The **engorged liver** may suggest some liver disease and the findings at the base of the lung associated with dyspnoea may be confused with broncho-pneumonia but the unusually quick pulse rate with or without failure symptoms and an afebrile course suggest the cardiac origin of the mischief Where available the electrocardiogram will clarify the mystery

**Course**—The paroxysms may last from a few seconds to hours occasionally for days or week rarely up to months The frequency of attacks are very variable

**Prognosis**—In mild asymptomatic cases the prognosis is better But in quick rate the effects on the heart muscle is due to other causes besides improper nourishment during attacks as a result of short diastole In the absence of any definite myocardial lesion these attacks may not have any significance but in defective myocardium or in very quick rate failure symptoms are common As signs of organic heart disease they seem to have practically the same significane specially in the auricular variety as the extra systoles The ventricular variety more often associated with organic heart disease are of some serious import When complicatons like temporary blindness or convulsion *occasionally* occur the actual cause should be investigated Rearly death has been reported in a few cases during an attack

**Treatment**—During an attack the patient should be made to lie down immediately with garments loosened and made comfortable Mechanical measures like taking a deep breath and then holding it on as far as possible pressure on the carotid sinus a tight abdominal binder pressure on the eye balls to the extent of causing pain thus stimulate the vagus induction of vomiting by tickling the throat or by faucial irritation or making him swallow a hard object like the crust of a bread without much chewing etc may be of some use Some attacks stop spon

## 3 PAROXYSMAL TACHYCARDIA

Paroxysmal tachycardia may be (1) simple paroxysma auricular paroxysmal tachycardia (2) Nodal tachycar (3) Ventricular tachycardia (4) Paroxysmal attacks of a cular flutter (5) Paroxysms of auricular fibrillations

**Definition** —Paroxysmal tachycardia as the name indicat sudden onset of quick pulse rate lasting for a variable per as a result of production of waves of excitation and contrac at a very rapid but regular rate from tthe points already m tioned in the first paragraph But the exact site of origin these impulses can best be diagnosed by the electrocardiogra

**Etiology** —This is same more or less as in the case extrasystoles This condition is usually found in apparen healthy persons without any sign of organic heart dise Commoner between 20 to 30 yrs of age Flatulent dyspep mitral disea e of rheumatic origin emotional disturbances associations

**Simple paroxysmal tachycardia** —This is probably du impul es arising at a new focus in the auricle causing a regu series of extrasystoles Cases may be noticed during pregnan or after heavy meals etc.

**Clinical manifestations** —The commonest complaints m be slight but an apprehensive subject may experience period attacks of sudden onset of palpitation dyspnoea precordial di tress occasionally pain a sense of throbbing in the head an may be with fainting attacks due most probably to inadequac of central circulation

When the rate is very quick there may usually be sympton of rapidly developing cardiac failure such as venous congestio slight oedema engorgement of the neck veins tender liver etc

**On examination** there may be nothing more than unusua quick rate but at times the patient is pale cyanosed may b perspiring which may be profuse with variable breathlessness The pulse and the apex rate felt and simultaneously auscultate are equal and may vary from 140 to near about 200 or mor per minute The rhythm is regular and unaffected by change of posture Blood pressure records generally show a fall of systolic pressure and due to undue quickening the diastole being inadequate the cardiac output is diminished In severe cases specially with a higher pulse rate signs of cardiac failure as shown by the dilatation of the right heart the apex being shifted laterally and also with oedema of the inferior extremities prominence of neck veins enlargement of the liver which i generally tender on palpation and crepitation at the base of the lungs etc are found Due to ventricular exhaustion there may be pulsus alternans Gallop rhythm may also be noted

including thyrotoxicosis (4) In acute infections with or without myocarditis (5) In coronary disease (6) From chronic focal sepsis as in teeth tonsils, gall bladder appendix sinuses tubes in women and also in chronic infections of the respiratory gastrointestinal and genito urinary tracts and the skin

**Circus movement** —The normal sino auricular impulse passes round the terminals of the superior and the inferior venacava in two main waves and finally they meet to neutralise and end But as the *muscle* has just finished contracting it is in the refractory phase and does not contract till after a period of rest From this main wave first the auricle thence the ventricle contracts But in **auricular flutter** on account of pathological change in the neuromuscular apparatus one of these waves is stopped by a refractory zone formed on its way and cannot proceed further The unneutralised other wave travels round and round and since the refractory muscle is now contractile and there in no second wave to neutralise and oppose it it has an undisputed rapid action on auricle even up to 00 to 400 or more per minute As the path travelled is the same there is no irregularity But in **auricular fibrillation** also a similar phenomenon takes place but faster and the path way for the wave to travel is faster shorter and zigzag Hence the refractory and responsive muscles are affected in an inco ordinated way The path also varies with each revolution and not only the path but the plane of axis is also constantly changing hence the electro cardiogram shows changes of time axis and form or in one word the contractions are very dissimilar from one another The rate may be 400 to 600 but usually 4 0 per minute The return to normal sinus rhythm may be possible when the refractory phase of the muscles so increases as to break these irregular circus waves

**Effect on the heart and the circulation** —In the auricles due to lack of proper co ordinated contraction the ventricles have got to get filled by venous pressure and gravity thus the pre systolic murmur of mitral stenosis disappears at the onset of fibrillation In the venous pulse tracings A waves disappear so also P waves are lacking in electrocardiogram and the place of regular P waves is taken by small rapid oscillations shown in the electrocardiogram

The ventricles receive irregular impulses some of which are not conducted and show very irregular and dissimilar contractions varying in strength from each other Some of these contractions are not strong enough to open the aortic valve and thus give a pulse at the wrist This increased and irregular ventricular rate causes not only systematic irregularity of the pulse due to inadequate *filling* and poor contraction and thus symptoms of circulatory inadequacy are common associated findings in this condition

taneously In prolonged cases digitalis in suitable doses and in urgent cases strophanthin in one two hundred and fiftieth of a grain intravenously with glucose or digoxin 0 5 mm intramuscularly may be tried Quinidine in two to three grain doses three or four times a day orally have been found useful Recently vagus stimulants which are derivatives of acetylcholine such as Mecholyl Doryl or Carbachol in one to two mg doses thrice daily orally have been found of much use In cases of recurrence the above drugs might have to be continued for sometime In some of the cases due to gas in the intestines or stomach a simple carminative mixture may be of some use Prostigmin 0 5 mg subcutaneously is more effective and pleasan than acetylcholine derivatives

**Nodal Tachycardia** From clinical aspect and treatment there is hardly any difference from simple paroxysmal tachycardia detailed out already The electrocardiogram may show variat on accordingly As the impulse arises from the A V node the ventricles and auricles may contract almost simultaneously thu the electrocardiogram shows shortening of P R interval as the impulse originating not from the sinus has got to travel a shorter distance The P waves may be inverted as it arises from a different focus than normally and when the contractions of the ventricle and auricle exactly synchronise with each other they may be fused together with a resultant electrocardiogram

**Ventricular Tachycardia** —This is rather a rare condition due to the fact that regular sequence of premature ventricular systoles are unlikely In these cases the ventricle beats and the pulse rates are near about 160 per minute whereas the auricular rate is near about 80 per minute The clinical features are like those of simple paroxysmal tachycardia The electrocardiogram shows QRS complexes which may be abnormal with absence of P waves and the latter may be half or even one third numerically in comparison with the rapid ventricular rate

The question of paroxysmal auricular flutter and paroxysmal auricular fibrillation will be discussed under their corresponding heads

## 4 AURICULAR FIBRILLATION

**Synonym** —Delirium Cordis Pulsus Irregularis Perpetuan etc

**Definition** —Auricular fibrillation as the term indicates is characterised by a flickering and quivering auricular contraction of an inco-ordinated type with an irregular ventricular response This is probably the cause of 50 percent of irregularities and i present in about 60 to 70 percent of heart failures

**Etiology** —(1) More common in mitral stenosis of rheumatic origin (2) In myocardial degneration (3) Toxic condition

**Course** —Auricular fibrillation may be proxysmal coming and going abruptly but in majority of the cases normal rhythm may not be established even after treatment whereas in others spontaneous normal rhythm is established after suitable treatment

**Complications,** are marked congestive failure The dilated auricles lead to intra auricular clotting and when detached from the right auricle the pulmonary artery may be blocked resulting in sudden death from infarction of the lung Emboli detached from left auricle may go into arterial system and commonly in the brain and these are likely to develop suddenly when the fibrillation switches on to normal rhythm through forcible coordinated contraction under normal condition produced either spontaneously or under the action of quinidine

**Prognosis,** is usually grave unless very early and without myocardial damage When in association with other lesion the fate of the precipitating mother disease greatly influences this Even in cases with *impaired myocardial efficiency auricular* fibrillation may not be a serious risk so long as the ventricular rate can be controlled within normal limits under digitalis because such as quick rate is by itself a load on the myocardium As in thyrotoxicosis and other removable causes the prognosis is fair

**Treatment** —(1) **Digitalis** in proper doses acts like a specific As there is generally associated congestive cardiac failure adequate digitalisation to keep the pulse rate near about 70 per minute and the maintenance dose of digitalis continued for the rest of the patient s life

(2) **Quinidine** —Once compensation is established through digitalis therapy or in cases of recurrent fibrillation without signs of right sided failure quinidine in proper doses by increasing *the refractory phase* and by *reducing the conductivity of the* myocardium acts by influencing favourably the circus movement It is usually given in two to five grain doses thrice a day for the first day four times the next day and so on till the rate is altered and gradually the dose is reduced in likewise manner But always before actually giving the therapeutic doses the sensitiveness of the patinent to this drug should have to be tested by two to three grain one initial dose and the above bigger dose continued when found nonsensitive

Quinidine however has some disadvantages (1) It may not succeed in all cases and even when successful in establishing normal rhythm fibrillation may recur in many (2) Dislodgment of intra auricular thrombi may cause serious symptom or even death in big pulmonary embolism as mentioned already (3) Some patients are very sensitive to this drug (4) Sudden death due to cardiac inaction notably in the presence

Due to improper contraction and associated usual dilatation formation of thrombi at the angle of auricles is common and may produce serious embolic complications by their lodgment

**Clinical manifestations**—The subjective difficulties vary according to the frequency of the ventricular contractions as in slow rate there may not be much difficulty experienced, but with too low a rate there may be attacks of Stokes and Adams syndrome But in untreated auricular fibrillation the pulse rate varies from 100 to 160 per minute and hence there are associated signs of decompensation like dyspnoea palpitation oedema prominence of neck veins enlarged tender liver and others

**On examination** there is usually some cyanosis **Pulse** as a rule very irregular in all respects and the rhythm also irregularly irregular and the rate as mentioned already P the pulse rate generally does not represent the ventricular rate and the latter as ausculated at the apex of the heart is found to be more numerous than the pulse rate because some of the ventricular contractions are not strong enough to open the aortic valve and thus give rise to a pulse at the wrist

**Heart Inspection**—The apical impulse is usually more outwards than normal and may also be downwards The apex beat may be felt to be irregular and the presystolic thrill of mitral stenosis usually is not palpable with the onset of fibrillation **Percussion** generally reveals enlargement of the heart laterally **Auscultation** The apex beat is generally forcible and there might be variable murmurs but generally the presystolic murmur of the earlier stages of mitral stenosis disappears with the establishement of fibrillation The rhythm is hopelessly irregular and the beats vary in force and as already said the rate of ventricular contractions are numerically more than the pulse rate for the reasons given already There are usually signs of congestive cardiac failure detailed already

Pulse tracing shows complete irregularity

**The electrocardiogram** generally shows absence of P wave and the other changes in the auricle under electrocardiography have been discussed The ventricular complexes are also irregular and irrhythmical and arise from improper of ectopic foci

**Diagnosis**—The condition is diagnosed by (1) quick irregular pulse of which no two beats are alike (2) some failure symptoms are there specially in undigitalised cases (3) the ventricular rate at the apex being numerically greater than the pulse rate at the wrist (4) the blood pressure while being taken varies from beat to beat But for slow fibrillations the sure diagnosis generally rests on electrocardiography

For differential diagnosis see paroxysmal tachycardia extrasystoles and auricular flutter

**Electrocardiogram**—The P waves may range from 200 to 320 or more per minute. They are regular in all the leads and may be dome shaped and inverted. Generally the alternate P wave shows a ventricular complex thus there one to one block. There may be two to one or three to one block also noted thus ventricular complexes may be half, one third or rarely even one fourth of the P wave showing the variable degree of block.

**Course**—Though generally seen in paroxysms of shorter and variable duration but occasionally it may persist for years or longer.

In some normal rhythm may not be established even after treatment whereas in others normal rhythm may come occasionally spontaneously or after suitable treatment.

**Complications**—Though not strictly a complication yet when in a paroxysm the ventricles assume a high rate the patient may become unconscious and may die unless the rate is made to get reduced either by establishment of block or by any other means of treatment etc. Congestive cardiac failure is commoner in cases of quicker rate specially when of some duration.

**Prognosis**—This is generally serious and may be immediately grave in cases with very quick ventricular rate or in persons already with failure. The integrity of myocardium is a very important factor in prognosis besides the rate of the pulse and duration and nature of the attack.

**Treatment**—Immediate rest in bed. Quinidine and digitalis as used in the case of auricular fibrillation already discussed.

## 6 VENTRICULAR FIBRILLATION

**Definition**—As in auricular fibrillation so also in ventricular fibrillation proper co-ordinate contraction of the ventricles is replaced by fibrillary in co-ordinate contraction and is a frequent cause of sudden death.

**Etiology**—**Experimentally** this condition may be induced by electric and other stimuli and by ligature of a main branch of the coronary artery and massive therapy by digitalis, strophanthus, quinidine or adrenalin in very poisonous doses.

**Clinically,** occasionally sudden abrupt thrombosis of one of the main coronary arteries may cause ventricular fibrillation leading rapid death. It may also occur in some cases of chloroform anaesthesia. It may also occur following auricular fibrillation, ventricular paroxysmal tachycardia, multiple extra systoles in complete auriculo ventricular block, in certain infectious cases like diphtheria.

of gross myocardial disease due to the depressing action of the drug is a serious disadvantage but fortunately is very uncommon Even those who are not sensitive may find intolerance to this drug and may complain of headache ringing in the ears nausea vomiting pain in the abdomen etc Due to probably spasm of the retinal vessel there may be dimness of vision and at times ventricular extrasystoles both signs of danger and suggest stoppage or reduction of the dosage Sometime a maintenance dose of one three to five grains may have to be continued for a long time

## (7) AURICULAR FLUTTER

**Definition**—A condition of regular but very rapid contraction of the auricles to which the ventricles may not always respond thus there is some heart block According to Lewis the contraction wave follows a circular and neverending path in the auricle the complete circuits being accurately repeated usually from 200—320 times per minute in different subject.

**Etiology**—This is more or less the same as in auricular fibrillations

In flutter the ventricles seldom can possibly contract at the same rate as the auricles and generally there is some degree of block and the ventricles usually beat at half or one third the rate thus with one to one or two to one block In about one third of the cases the degree of heart block frequently change and under such circumstances the heart rate becomes irregular and it may be difficult to distinguish from auricular fibrillation without an electrocardiogram

**Clinical manifestations**—The patient usually of past middle life may give the history of attacks of palpitation which would come as suddenly as it would go away but he complains that the last few attacks were more or less persistent The subjective symptoms vary according to the duration rate and the condition of the myocardium and other factors

**On examination** the pulse is usually regular in rhythm but the rate generally varies from 130 to 160 per minute and corresponding with it there are regular apex beats exactly corresponding with the rate of the pulse The veins in the neck may be seen to be throbbing very frequently and usually corresponds to the auricular rate which may be double to three times that of the pulse or apex rate The heart is enlarged and the apex shifted outside and the arteriae may be thickened The pulse rate is as a rule unaffected by change of posture or physical exercise There are usually some signs and symptoms of dyspnoea or mild failure specially in cases of some duration with a very quick rate Valvular defect may or may not be present

subjects or atheroma or gummata involving the bundle may also cause it (C) In younger people acute infections like diphtheria rheumatic fever typhoid fever rarely influenza and pneumonia etc (D) Poisoning by digitalis group of drugs and also by quinidine (E) Rare congenital septal defect Though there may not be any demonstrable structural change in some of the intoxications and acute conditions mentioned above yet probably a functional depression of this delicate conducting mechanism is the underlying factor in the block

Clinical manifestations —The patient may not complain of anything at all or only of the original disease of the heart and only of the block when it is of a severe degree When the ventricles fail to respond to the auricular impulse there is a very low pulse causing cerebral anaemia sometime manifesting Adams-Stokes syndrome These attacks come on suddenly with convulsive movement of the face and the arm the eyes may stare out The patient is pale cyanosed with deep or stertorous breathing Usually the spasm is limited to the face and upper extremities, neither the tongue is bitten nor urine passed involuntarily So Adams Stokes syndrome may occur in (a) partial heart block passing on to complete block and before the idio ventricular rhythm is taken up and the pulse is slow (b) In partial heart block with failure of response by the ventricles with a very slow pulse (c) Complete heart block with abnormally low rate of near about 30 per minute (d) In rare cases of very slow pulse due to much raised intracranial pressure or in pronounced bradycardia following influenza or diphtheria but the first cause appears to be the commonest

On examination auscultation of the apex with about 30 to ? beats or slower per minute may mean a partial or complete block and there are risks of Adams Stokes syndrome supervening That it is due to block is proved by observing the pulsation in the jugular veins corresponding to auricular contraction which are numerically more than the ventricular or apical or pulse rate

Course.—Post infective cases following influenza diphtheria or typhoid fever recover quickly Rheumatic variety in the young may also improve The degenerative and the arteriosclerotic variety in the elderly is likely to be permanent and near about the onset of complete block there is the risk of Adams Stokes syndrome

Diagnosis —For the first grade of block a polygram or an electrocardiogram shows the lengthened A C or P R interval Clinically the missed beats which occur at the wrists due to heart block or due to weak extrasystole in the former cases there is silence during auscultation at the apex but in the latter a feeble

Once ventricular fibrillation is established there is generally sudden loss of consciousness and death almost invariably follows **Quinidine** in small doses may lessen the risks of the condition occurring Once established massaging of the heart if feasible may sometime be effective

## 7 HEART BLOCK

**Definition** —A condition of delay in the passage of cardiac impulses in the course of the neuromuscular mechanism Heart block may be (1) sino auricular block, (2) auriculo-ventricular block (3) bundle branch block (4) arborization or intra ventricular block

(1) **Sino auricular block,** is a rare condition in which the impulse arising at the sinus fails to cause the auricles to contract The result is the failure of the whole heart to contract causing a missed beat at the apex as well as the wrist but the succeeding contractions generally occur at approximately normal intervals Occasionally alternate sinus stimulus may fail to cause contraction of the auricles where the pulse rate is slow and is diagnosed by the absence of the auricular and ventricular complexes in the electrocardiogram Some physical exercise or injections atropine sulphate may double the rate In some cases successive stimuli from the sinus may be blocked resulting in long pause of heart and thus evoke syncope or Stokes Adams syndrome Full doses of digitalis rarely may cause this type of block

(2) **Auriculo ventricular block** —There is delay in the passage of the impulse from the auricle to the ventricle There are four grades of this type of block described

(1) The earliest is only delayed conduction from the auricle to the ventricle only detectable by electrocardiogram where the P R interval is longer than normal one fifth or 0 2 of a second (2) In this second type the ventricle occasionally fails to respond to auricular impulses (3) In the third variety the ventricle fails to contract regularly or methodically say every second or third or fourth auricular impulse These three grades of block are called **incomplete or partial heart block** (4) **Complete heart block** In this variety there is complete dissociation between auricle and ventricle and the latter contracting at its own rhythm (idio-ventricular rhythm) of about 30 to 40 per minute The electrocardiogram helps to diagnose these conditions with certainty

**Etiology & Pathology** —(A) The commonest changes are caused by atheroma of the coronaries and fibrosis of the myocardium involving some part of the conducting neuomuscular apparatus (B) Syphilis or myocardial fibrosis in syphilitic

suggestive of the corresponding axis deviation This condition is of grave significance death usually following generally in two years after detection, although some patients have lived for several years after diagnosis

**Arborization or intraventricular block** —The terminal subendothelial divisions of Purkinje s fibres have diminished conductivity hence the stimulus does not reach the various parts of the ventricular muscle in normal sequence The lesion can be diagnosed only by electrocardiogram

The **prognosis** is more serious than that of bundle branch block and is almost always grave

## 8 PULSUS ALTERNANS

**Definition** —This condition shows alternate strong and weak contractions of the ventricles the rhythm being regular *It is probably indicative of depressed contractility and probably* the heart is working under excess of burden and hence is exhausted

**Etiology** —Though it may be found in association with abnormal cardiac action like auricular flutter yet the majority are in persons past middle age with hypertension myocardial degeneration or cardiac hypertrophy or coronary disease or occasionally in younger people with rheumatic heart disease and rarely after acute illnesses like pneumonia and others

***Clinical manifestations*** —*Unless very careful and experienced* by simple palpation of the pulse one may not be able to detect it A pulse tracing or sphygmogram shows an alternate higher and a smaller beat at very nearly regular intervals Much more diagnostic is the auscultatory method of recording blood pressure At a particular higher pressure only alternate beats will be heard but by lowering the pressure by 1 to 5 or 20 to 30 mm in extreme cases both the beats are audible and the frequency of the pulse is now double that of the pulse rate taken at a higher pressure obliterating the weaker pulse The electrocardiogram may show R waves of equal intensity but the radial pulse tracing demonstrates the pulsus alternans

Pulsus bigeminus caused by an extrasystole following regularly one normal beat may be distinguished by the longer pause between the premature beat and the next normal one

**Prognosis** —When associated with tachycardia or during digitalis therapy it is not of such serious prognostic significance as when it is present in a slow rate In the latter state death follows in a few months or at the most in a few years In cases following acute illness though the condition is likely to be temporary but a guarded prognosis is indicated as pulsus alternans generally means exhaustion of the myocardium

apex beat is audible but this is not sufficiently strong to open the aortic valve to give a pulse

On inhalation of amyl nitrite a case of two to one heart block (partial) may abruptly show double the pulse rate, to revert to the old slow rate again when its effect passes off but in simple bradycardia nothing like this happens In complete block neither amylnitrite inhalation nor physical exercise nor injection of atropine will alter the rate of the pulse

**Prognosis**—Heart block always indicates some degree of organic myocardial involvement temporary after acute infections or permanent in degenerative or arteriosclerotic cases Onset of Adams Stokes syndrome makes the outlook gloomier Death may occur during an attack from cardiac standstill or asystole

**Treatment,** should mainly aim at removal of the cause where possible

To increase the conductivity injection of adrenalin chloride atropine sulphate or both combined or combination of adrenalin and ephedrine or atropine and ephedrine by mouth may be of use The usual dose for injection of there drugs is adrenalin half to one c c atropine one sixtyfourth to one hundredth of a grain and ephedrine about one fourth of a grain For oral use atropine is used in double the above dosage and ephedrine in about one fourth to half grain In Adams-Stokes syndrome repeated injections of adrenalin chloride and atropine sulphate every four hourly may be with ephedrine hydrochloride orally may have to be continued for days even to prevent attacks half grain doses of ephedrine orally may have to be repeated every four to six hours Barium chloride in half to two thirds of a grain thrice or four times a day may be of use in some cases where atropine sulphate and adrenalin chloride have failed In cases of syphilis proper treatment by potassium iodide bismuth and arsenicals may improve matters Coronary dilators like euphyllin or muscle extract or others may be of use

**Bundle branch block**—There is delay in conduction of cardiac impulse in one of the branches of the bundle of His the left appears to be more commonly affected than the right The etiology and pathology are the same as in the auriculo ventricular block The condition can only be diagnosed correctly by electrocardiogram Sometime auriculo ventricular block or less frequently auricular fibrillation may coexist with a bundle branch block In electrocardiogram the QRS complex is wider i e longer than normal duration of 0 1 second the R wave is notched and the S wave is deep and is in opposite direction of the R or S deflection According to the bundle branch block there may be findings

around during inspiration it is pulled on from above and from below This causes partial obstruction of the orifices of the venae cavae with diminished inflow and outflow from the heart

## PALPITATION

**Definition**—Attacks of consciousness of the cardiac impact against the chest wall with or without increase of rate

**Etiology**—It is more common in women than in men may be due to (1) **reflex** as in distended stomach or an enlarged uterus as in advanced pregnancy or in gas in the intestines (2) ***Toxic in over use*** of tea tobacco alcohol coffee etc (3) **Nervous excitability** of instability at puberty or at menopause neurasthenia hysteria mental excitement (4) **overstrain** exhausting illnesses following acute fevers emotions excessive physical exercise and exertion etc. (5) Occasionally organic heart diseases may also be associated with it

***Clinical manifestations—Subjective*** There is consciousness of the heart's action which may be sudden or gradual in onset and passing off by itself This subjective sensation may be violent or mild in nature Sometimes there is discomfort, and occasionally even there is pain The patient may complain of a sense of flushing ringing in the head and a feeling of faintness

***On examination*** the pulse rate is generally increased Sometimes to a considerable degree but it may be also normal to increase on exertion quite unlike paroxysmal tachycardia which is not influenced by physical exercise The pulse when very quick is of smaller volume The larger arteries in the neck may show pulsation The apex beat may be normal in position but the area of heaving may be larger in extent than normal The heart is normal in size and on auscultation except that the second sounds at the base of the heart may be accentuated In organic heart disease corresponding evidences and findings are obtained In dyspeptic cases with gas in the intestines or stomach eructation of a large quantity of gas may give partial or complete relief Occasionally a sense of exhaustion may follow an attack

Prognosis is generally good the **treatment** depending on the cause

## CARDIAC PAIN

The commonest causes of discomfort or pain in the precordium are (1) neurasthenia or emotional states (2) general weakness (3) convalescence from acute illness (4) digestive disorders including gall bladder dyspepsia particularly when associated with flatulent distension of the stomach or colon (5) in irritable heart (6) cardiac failure (7) angina pectoris (8) coronary thrombosis (9) coronary sclerosis or narrowing (10) in pericarditis

**Treatment** —This condition in association with slow rate of pulse suggests complete rest in bed to be imperative and in long continued cases this absolute rest in bed should be very prolonged Improvement of general health tonics vitamins specially B complex and according to suitability digitalis coronary dilators are indicated but must be given judiciously

**The above eight conditions constitute the main items causing irregularity of the action of the heart**

# VARIATION IN THE PULSE

(A) **Intermittent pulse** —This is one of the commonest irregularity and indicates that the normal rhythm of the pulse is interrupted either occasionally or more frequently either at regular or irregular intervals by an abnormally long pause during which no pulse is felt at the wrist thus a beat is missed By far the commonest cause is a ventricular extrasystole Next common cause is partial heart block occasionally due to sinus irregularity and rarely from sino auricular block The detail of differential diagnosis have already been discussed under extrasystoles heart block etc

(B) **Coupling of beats or pulsus bigeminus** is a condition in which the pulse beats occur in pairs for short or long period They may occur at regular or irregular intervals and some restrict the term pulsus **bigeminus** to the former and that of coupling of beats to the latter When the pair of beats appear at regular intervals the commonest underlying cause is ventricular extrasystole The next common cause is partial heart block when the ventricle fails to respond to every third beat of auricle A rare cause is sino auricular block in which the auricle fails to respond to every third impulse formed at the sinus Digitalis when effective in heart disease may also show coupling of beats

(C) **Pulsus trigeminus** is a condition in which the pulse beats are grouped in threes The causes are almost the same as in pulsus bigeminus

The differential diagnosis of all these conditions has already been discussed

## PULSUS PARADOXUS

**Definition** —A condition in which the pulse weakens in intensity during inspiration and becomes stronger with expiration

**Etiology** —Pulsus paradoxus is often associated with pericardial effusion and chronic mediastino pericarditis and is explained by the fact that during normal inspiratory movement the roots of the lung descend down and the heart is carried down with them If the heart is fixed by adhesions or pressed by fluid

just short of fatigue breathing exercises may be of great help Patients with septic foci should have them eradicated if possible In very severe cases hypnotics and sedatives may have to be given notably at the initial stages Occupational and diversional therapy may be of some use

# DISEASES OF THE PERICARDIUM

*Pericarditis* may be of the following types

(1) Acute dry pericarditis or acute fibrinous pericarditi

(2) Pericarditis with effusion which might be (a) serofibrinous (b) pyopericardium (c) haemopericardium

(3) Chronic pericarditis

## ACUTE PERICARDITIS

**Synonym** —Acute dry pericarditus Dry pericarditis Plastic pericarditis Fibrinous pericarditis

**Definition** —An acute inflammation of the pericardium without or with slight collection of fluid

**Etiology** —I **Primary cases** are rare probably are caused by (a) hidden or undiscovered septic foci In children they are generally either (b) tuberculous or pneumococcal (c) traumatic pericarditis may result from wounds of the oesophagus or chest wall

II **Secondary pericarditis** may be due to (a) **infections** commonest is **rheumatic fever** less commonly along with chorea (b) **Focal infections** from teeth tonsils gall bladder appendix sinus tubes in women skin and others septicaemia pyaemia osteomyelitis tuberculosis etc (c) **Specific fevers** like *enteric fevers diphtheria measles small pox* scarlet fever etc (d) **From local extension of disease of lung** chestwall mediastinum pleura or abdomen (e) **Terminal** pericarditis in nephritics cirrhotics subjects of diabetes mellitu leukaemia pernicious anaemia scurvy chronic kala azar splenic anaemia etc

**Pathology** —The causative organisms are those causing rheumatic fever and is by far the commonest next come pneumococci strepto staphylo or gonococci tubercle bacilli occasionally B *coli* and B typhosus

A thick fibrinous deposit collects over both the layers of the pericardium giving the *heart a shaggy '**bread and butter*** appearance There is varying amount of serous exudate scanty in rheumatic and serous or purulent in pneumococcal or other infections The fluid collects at first at the bases of the heart Evidence of *old healed lesion* is sometime found at autopsy in the form of thickened white areas known as **milk spots**

*The first five are more or less functional and not much* sociated with any organic disease of the heart The last when cause persistent and regular precordial pain need seri investigation and the prognosis and the treatment will dep *according to the underlying factors*

## IRRITABLE HEART

**Synonyms**—Effort syndrome neuro-circulatory asthe irritable heart of soldiers disordered action of the heart (D H ) Da Costa s syndrome

This is a syndrome commonly met with in improperly imperfectly trained soldiers and in adolescents and others civil practice

**Clinical manifestations**—The patient is usually a you adult male or female complaining of shortness of breath a palpitation on moderate or even slight physical exertion may also suffer from fainting attacks and become giddy sudden change of posture There may be the history of an un table nervous system dyspepsia or chronic constipation tonsillitis suggesting auto-intoxication

**Physical examination**—The body and musculature generally poorly developed that the peripheral circulation a the vasomotor system are bad and unstable as proved by t cold extremities with a tendency to sweating The tolerance physical exercise test is either poor or tolerable He may may not be anaemic **Heart** The apex beat is diffused and forcib but generally without any cardiac enlargement There may a systolic murmur heard at the apex or base of the heart a may be of a functional nature

**Diagnosis**—Signs and symptoms described above withou any apparent cause suggest the diagnosis But other causes tachycardia have got to be excluded

**Differentiation**—A careful investigation should be mad to exclude any organic heart disease For the differentiation his condition from effort angina and coronary disease will b dealt with under the latter condition

***Prognosis***—*Though* at times may cause *some incapacit* it does not shorten life Sometemes the patient is incapable any useful work because of his complaints A careful manage ment with tact may improve matters

***Treatment***—*The precipitating factors like (1) neuropath* tendency (2) mental strain and (3) physical inferiority or in fections require proper treatment

A thorough and careful examination and general assurance and encouragement may help matters considerably For gene ral health a good vitaminous diet specially rich in B vitamin complex and an open air life with moderate physical exercis

just hurt of fatigue breathing exercises may be of great help Patients with septic foci should have them eradicated if possible In very severe cases hypnotics and sedatives may have to be given notably at the initial stages Occupational and diversional therapy may be of some use

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A thick *fibrinous deposit* collects over both the layers of the pericardium giving the heart a shaggy **bread and butter'** *appearance* There is varying amount of serous exudate scanty in rheumatic and serous or purulent in pneumococcal or other infections *The fluid collects* at first at the bases of the heart Evidence of old healed lesion is sometime found at autopsy in the form of thickened white areas known as **milk spots**

**Clinical manifestations Subjective**—When a child or a young adult is affected there is commonly a rheumatic history may be also chorea notably in female children An adult suffering from any of the conditions mentioned above, whereas in an elderly man with or without debilitating cause it may be terminal The most important **subjective complaint** is of pain in the precordium occasionally rediating to the left arm abdomen or neck It may be intensified by breathing coughing or by movement In some cases the pain may be only a dull ache or slight discomfort On **physical examination** the patient appears ill has an anxious look and may be pale due to fever and toxaemia He is febrile the temperature rising generally up to 101 to 102°F the pulse rate is usually between 110 to 130 per minute **Chest Inspection** The precordium may be bulged specially in children and the apex beat is quick **Palpation** A to and fro or biphasic friction rub is usually palpable **Percussion** The heart may or may not be enlarged **Auscultation** Generally the charactetristic to and fro rub is audible though usually it synchronises with the action of the heart it may not necessarily be so pressure of the bell of the stethoscope may intensify it The **character** of the rub may be like friction leathery or creaking loud or very faint or may be different It may be very variable according to the change of posture and strangely may or may not be heard under exactly identical conditions The site where it is best heard may be the apex or the base or any other part of the heart In some cases it is best audible on deep inspiration or when the patient is sitting up

**Blood** generally shows some leukocytosis which may vary according to the causative agent in coccic infections it may vary from ten to fifteen thousand per c m m or more with increase of neutrophils

**Diagnosis**—Pain and friction rub on the precordium are important diagnostically but the friction sound being very variable may or may not be audible under identical conditions at different times

**Differential Diagnosis**—**Endocardial murmurs** coincide with the cycle of the heart i e either systolic or diastolic may be with conduction and generally without pain may show cardiac enlargement

**Pleuro-pericardial murmur,** is commonly heard on the left or right border of the heart synchronising with respiratory excursions and usually disappears on full inspiration and returns during the act of expiration whereas pericardial friction is not influenced by breathing

**Pleural rub** over the precordium may cause difficulty but on full inspiration pleural friction stops but pericardial rub is uninfluenced by breathing

*Course*.—Most cases may get resolved without passing on the stage of effusion. In some serous, purulent or haemorrhagic pericardial effusion may develop. Adherent pericarditis may be a grave sequela.

**Prognosis**.—Immediate prognosis may not be bad. But it depends on the cause, rheumatic group being more favourable than the others. In old age and in diabetics and in terminal conditions it is serious and usually closes the scene. The course taken by the lesion subsequently also determines the prognosis.

**Treatment**, depends on the cause and according to the associated morbid conditions.

The other lines of management are more or less the same as that of simple acute endocarditis. The other points are (1) absolute rest for prolonged period. (2) specifics like sulphonamides, penicillin and streptomycin according to the causative agent for prolonged periods may be up to two to three months continuously. (3) Symptomatic treatment by salicylates, counter irritant liniments may be rubbed on the precordium, good square diet with adequacy of A and D vitamins, regulation of the bowels, tonics containing iron, arsenic, nux vomica and others may be of use.

## PERICARDIAL EFFUSION

The fluid may be clear in (1) sero-fibrinous commonly inflammatory or occasionally non-inflammatory i.e. hydropericardium or transudate from heart or kidney diseases or in intense anaemia and other hypoproteinaemic states. (2) Purulent or pyopericardium. (3) Haemorrhagic or haemopericardium or haemoseropericardium or haemohydropericardium and so on.

## PERICARDITIS WITH EFFUSION

**Definition**.—Accumulation of inflammatory serous fluid in the pericardial sac.

**Etiology**.—The causes are the same which give rise to dry or fibrinous pericarditis mentioned already may cause the accumulation of fluid. Generally it is acute but may be insidious in some patients notably in children.

**Pathology**.—There may be from a few ounces to two pints or more of fluid collected in the pericardial sac. The colour of the fluid varies according to the causative organism. In rheumatic cases it may be straw coloured, in pneumococcal cases greenish, in other coccal infections turbid and so on.

The specific gravity of this fluid is near about 1018 and the fluid coagulates spontaneously on standing. The pericardium is thickened by a fibrinous exudate and there is generally some myocardial degeneration.

**Clinical manifestations Subjective**—When a child or a young adult is affected there is commonly a rheumatic history may be also chorea notably in female children An adult suffering from any of the conditions mentioned above, whereas in an elderly man with or without debilitating cause it may be terminal The most important **subjective complaint** is of pain in the precordium occasionally rediating to the left arm abdomen or neck It may be intensified by breathing coughing or by movement In some cases the pain may be only a dull ache or slight discomfort On **physical examination** the patient appears ill has an anxious look and may be pale due to fever and toxaemia He is febrile the temperature rising generally up to 101 to 102°F the pulse rate is usually between 110 to 130 per minute **Chest Inspection** The precordium may be bulged pecially in children and the apex beat is quick **Palpation** A to and fro or biphasic friction rub is usually palpable **Percussion** The heart may or may not be enlarged **Auscultation** Generally the charactetristic to and fro rub is audible though usually it synchronises with the action of the heart it may not necessarily be so pressure of the bell of the stethoscope may intensify it The **character** of the rub may be like friction leathery or creaking loud or very faint or may be different It may be very variable according to the change of posture and strangely may or may not be heard under exactly identical conditions The site where it is best heard may be the apex or the base or any other part of the heart In some cases it is best audible on deep inspiration or when the patient is sitting up

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area is pearshaped and the cardio hepatic angle is obtuse and not acute or at right angles as in dilatation There is absolute dullness on percussion whose limits may vary according to the change of posture The liver and spleen may be pushed down to be palpable The heart sounds specially at the apex is usually distal or muffled

***Differential diagnosis*** —*Dilatation of the heart* The precordial bulging and the fullness of the intercostal space specially the latter is unlikely the apex beat is always palpable but may be shifted to the left the cardio hepatic angle is not obtuse the dulness is not pearshaped the heart sounds are not muffled there may be failure symptoms present along with it

**Hydropericardium** —It is secondary to either heart failure *chronic nephritis intense anaemia or malnutrition* in beriberi leukaemia ancylostomiasis mediastinal growths etc The patient usually complains of the original disease which may mask the pericardial transudate and the signs and symptoms are *those of pericardial effusion already discussed* Usually there is in association oedema of other parts of the body

**Pyopericardium** —It may be a complication of pyaemia notably with osteomyelitis An empyema or a lung abscess may by contiguity directly infect the pericardium It may be also tuberculous in origin There is leukocytosis evening rise of temperature pallor sweating and other signs of pus under pressure Physical signs and symptoms are those of pericardial effusion

**Haemopericardium** —Blood in the pericardial sac may result from rupture of the heart or coronary vessels or medicolegal aneurysm etc or from external trauma or from wounds or rupture of oesophagus and occasionally from bleeding diseases The condition is easily diagnosed and proves quickly fatal

**Localised left sided pleural effusion** does not show the characteristic signs and symptoms of pericardial effusion but points to the pleural disease because the heart is displaced to the right with displaced visible apex and its sounds are clear

In all these cases mentioned above as well as in this condition the causation mode of onset and the physical signs and symptoms and a skiagram usually clarify the difficulty

**Course** —The fluid gets absorbed in a variable period of time or a few days to a few weeks resulting in adhesive pericarditis may be with the appearance of a leathery rub and others In some cases the fluid may turn purulent

**Prognosis** —It is always serious The immediate prognosis varying with the cause underlying The effusion collected in the course of acute fevers may lead to recovery but in septic infections it is rather serious

**Clinical manifestations Subjective**—The patient a child or an adult usually with a history of dry acute pericarditis in which the pain might have been replaced by dyspnoea or when only the pain is gone the collection of fluid is detected Occasionally it comes insidiously specially in children who may be pal and get out of breath easily They may complain of a sense of oppression or pain dyspnoea, and palpitation may be sweating and slight pyrexia In larger collection dysphagia vomiting cough which is fruitless hiccough and hoarseness due to pressure paralysis of the recurrent laryngeal nerves may be found Insomnia may be troublesome He likes to be propped up because sitting is more comfortable than lying flat

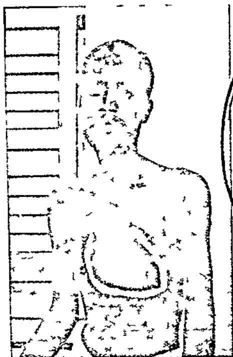
**Physical examination**—The pale patient may be slightly cyanosed and in larger collections the alae nasi may be seen working with some breathing difficulty The neck veins may be prominent

**Chest—Inspection** The precordium may be bulged with diminished expansion of the left side of the thorax The apical impulse is usually invisible only a diffused wave over the third fourth and fifth left interspaces, may be seen The normal respiratory excursions of the diaphragm are limited or almost absent **Palpation** The previously present apical impulse and friction fremitus has disappeared occasionally there may be oedema of the precordium which pits on pressure The liver and spleen may be pushed down so as to be palpable

**Percussion** reveals an enlarged pear shaped dullness with the neck upwards the upper level altering according to the posture of the patient In the left side the dullness may extend even up to axilla in big collection on the right side the normal cardio hepatic angle is obliterated (Roth s sign) because of spreading out of the fluid **Auscultation** The cardiac apical sound becomes gradually distal as more fluid collects The maximum apical sound is heard in an area which is internal to the outer limit of cardiac dullness suggesting collection of fluid In **lungs,** due to pressure of the pericardial fluid collecting posterior to the heart there may be pressure symptoms like a small area of dullness near the inferior angle of the left scapula showing bronchophony pectroiloquy (Bamberger s or Ewarts sign) The pulse is usually rapid and feeble during inspiration to become stronger during expiration i e pulsus paradoxus There is slight or moderate leukocytosis The skiagram of the heart shows characteristic pearshaped shadow on erect posture and globular on recumbent position

**Diagnosis**—Precordial bulging obliteration of the intercostal spaces the apex beat may be impalpable or when faintly palpable it is internal to the extreme area of cardiac dullness and may be displaced up to the third or fourth space the dull

en the precordium may help in the diagnosis Being fixed change of posture does not alter the position of the apex beat





**Note the very big heart of adhesive pericarditis**

**Constrictive Pericarditis**—Though rheumatic fever is the commonest cause of acute pericarditis it rarely produces this form of disease Most of these patients who are either youn adults or persons having reached middle age may complain of **increasing dyspnoea followed by enlargement of the liver, oedema of the legs ascites prominent neck veins without pulsation** and sometimes **pleural effusions** Strangely clinical and radiological examination show no enlargement of the heart though sometimes kimogram reveals calcification of the pericardium The apex beat is fixed with the fixation of the heart which does not change as does the normal apex by change of posture

This condition should be suspected when a previously healthy adult below middle age slowly and gradually develops dyspnoea and oedema Niemann and Pick described this condition years ago

**Treatment**—It consists of the mother disease of which the pericarditis is only a symptom. *In tuberculous variety the fluid* collects very quickly and may require tapping. In septic or in purulent conditions sulphonamides and penicillin in adequate doses and that for a prolonged period may be of considerable use. In tuberculous variety notably when acute injections of streptomycin may do good. The rest of the therapy depend on the cause, type, nature, etc. of the infection.

# CHRONIC PERICARIDTIS

## ADHERENT PERICARDIUM AND CONSTRICTIVE PERICARDITIS

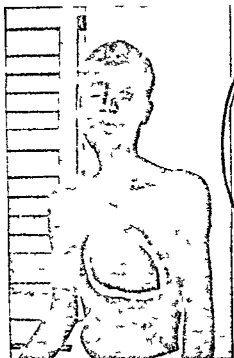
Following acute pericarditis the two layers of the pericardium, visceral and parietal may become adherent. Beside *adhesions may from between the adherent layers of the pericardium* to the surrounding structures such as the diaphragm, pleura and the chest wall causing variable degree of hypertrophy of muscle of the heart. The adhesion only between the two layers of the pericardium alone, may not produce any symptom and is detected usually by chance at autopsy. When the pericardium is much thickened and is adherent to other structures the heart has got to work under considerable resistance. In addition, the thickened pericardium generally obstructs the entry of venous blood primarily from the inferior veno cava thus producing back pressure in the liver, peritoneum, the lower extremities giving rise to ascites and oedema and polyserositis. This condition is termed **constrictive pericarditis or Niemann Pick's disease**.

**Adherent Pericardium**—For easy understanding one may divide this condition into three groups. (1) Adhesion between the visceral and parietal layers of the pericardium. (2) Adhesion extending to the diaphragm, chest wall and the pleurae. (Internal and External Adhesive Pericarditis) (3) With thickening of the mediastinal tissues (chronic indurative mediastino pericarditis may be with calcification).

In a large proportion of cases, specially those under group two and three mentioned, the heart has got to work under variable restrictions and against great resistance causing considerable hypertrophy of the heart.

Besides the enlargement, systolic retraction of the left tenth *and eleventh intercostal* spaces *at the back, in a line down the* angle of the scapula is called **Broadbent's sign** and is found when there is adhesion with diaphragm. Neck veins may be engorged and collapse during diastole. **Friedreich's sign** and other sign and symptoms of enlargement of the heart and a vibratory wave

en the precordium may help in the diagnosis Being fixed change of posture does not alter the position of the apex beat



Note the very big heart of adhesive pericarditis

**Constrictive Pericarditis** —Though rheumatic fever is the commonest cause of acute pericarditis it rarely produces this form of disease Most of these patients who are either young adults or persons having reached middle age may complain of **increasing dyspnoea followed by enlargement of the liver, oedema of the legs, ascites prominent neck veins without pulsation** and sometimes ***pleural effusions*** *Strangely clinical and* radiological examination show no enlargement of the heart though sometimes skiagram reveals calcification of the pericardium The apex beat is fixed with the fixation of the heart which does not change as does the normal apex by change of posture

This condition should be suspected when a previously healthy adult below middle age slowly and gradually develops dyspnoea and oedema Niemann and Pick described this condition years ago

Seldom rheumatic fever and in some cases tuberculosis appear to be responsible for this condition but in the majority of the cases the etiology is unknown

**Treatment,** of constrictive pericarditis is mainly surgical and the outlook without the help of the knife is bad hence the operation is justifiable specially when the pericardium is calcified

For adherent pericardium the patient should take rest and ve within the limits of the capacity of the cardiac musculature n all cases of convalescence of acute pericarditis the patient hould be made to take rest for prolonged periods as a preventive to the development of pericardial adhesions Once developed to its fullest extent surgery remains the only hope

## TUBERCULOUS PERICARDITIS

***Etiology & Pathology***—Tuberculosis of the pericardium ay be primary or part of an acute general tuberculosis or condary to that in the lungs pleura and the midiastinal and onchial glands It may be (1) dry type but more commonly th effusion which may be clear purulent or blood stained ) Miliary with mall tubercles along the blood vessels and lci of the heart (3) Larger tubercular masses on the epicarium ituated at the bases (4) A chronic pericarditis lasting for eeks and months ultimately leading to adhesion between the yers with much thickening result

**Clinical manifestations**—Clinically it may be (1) latent roughout its course (2) shows symptoms of acute pericarditis th loss of weight fever in the evening collection of fluid ironicity adhesions etc (3) Result in adhesive pericarditis th all its effects (4) May show symptoms of acute tuberculosis

**Diagnosis**—In the absence of history of rheumatic fever other cause of pericarditis in the presence of tuberculosis in her neighbouring areas and sign and symptom and the course the disease help in the diagnosis **Prognosis** is grave

**Treatment** with proper antitubercular regime as in lung ses usually improves specially in early cases The other lines as in *other forms of pericarditis* *Streptomycin injections* th or without para aminosalicylic acid may do good

# ISEASES OF THE MYOCARDIUM

## ACUTE SIMPLE MYOCARDITIS

**Definition**—It means acute inflammation of the heart uscle but it is employed to include also morbid change a degenerative nature

**Etiology**—It is common in childhood and adolescence acute and subacute rheumatic fever in some form accounts for the majority of cases Acute infections caused by diphtheria influenza pneumonia typhoid fever small pox malaria and others may also be responsible Most cases of pericarditis and endocarditis are associatetd with some degree of myocarditis

**Pathology**—Unless associated with endo or pericarditis the morbid changes are more or less of focal character In diphtheria there is granular hyaline and fatty degeneration followed by necrosis of the muscle fibres *due to direct action of the toxin* with cellular infiltration in the surrounding myocardium In rheumatic fever interstitial cellular infiltration in the interstitial connective tissue with degeneration of muscle fibres is common In rheumatic myocarditis the Aschoff s nodes may ultimately be converted into fibrous tissues Dilatation of one or more chambers of the heart may thus follow This condition may be followed by (1) complete resolution with no permanent residual damage or (2) formation of fibrous tissue of a more or less diffused character which tends to contract as life progresses and is known as **fibrosis of the myocardium** The importance and gravity of this condition affecting the musculature the most important component of heart has not been sufficiently treated in text books.

**Clinical manifestation**—This is very variable and depends on the severity of the case In some it may mean very little whereas in others it amounts to a serious and even grave illness

It may come on gradually and the temperature of the original disease may rise occasionally with a rigor The patient may complain of difficulty of breath palpitation precordial discomfort or pain Not infrequently vomiting may be the first symptom Cardiac failure of various degree notably in acute infections may be manifest

***The Pulse***—The pulse is generally frequent then slow down and is feeble and compressible Blood pressure is lowered Occasionally there are extrasystoles heart block auricular fibrillation particularly partial heart blocks are common Other symptoms point to dilatation and failure of the heart A moderate leukocytosis and slight secondary anaemia are common too

**Diagnosis** may be extremely difficult The recognition of a mild affection may be had from the signs and symptoms already discussed In severe cases the onset of rapid peripheral circulatory failure during the course of an infection quite out of proportion to the severity of the disease helps in the elucidation The occurrence of partial heart block during the course of an acute disease or auricular fibrillation and extrasystole should always be looked upon as indicative of acute myocarditis unless proved otherwise

**Differentiation** from acute endocarditis may be extren difficult and it is likely that both the conditions co exist an mitral systolic murmur may be due to either of them

**Prognosis,** is variable in milder forms recovery is the with due care but in grave forms the prognosis is serious v a high rate of mortality and that within 24 hours to a wee time The sudden death in diphtheria during the acute st or during convalescence may be due to this condition I features are marked pallor restlessness syncope vomiting a quick pulse with low tension or bradycardia due to heart bl nd the apical sounds resembling the foetal character Th may be signs of circulatory inadequacy like cold extremiti quickening of pulse on light exertion taking long to come normal etc

**Treatment,** is more or less like that of acute simple enc carditis except that the convalescence need not be so lo The immediate treatment of the peripheral circulatory failu need be prompt and cautious and judicious

# FIBROUS MYOCARDITIS

## (FIBROSIS OF THE MYOCARDIUM)

**Definition**—It is an overgrowth of connective tissue in th heart muscle It may be localised in patches or diffu throughout the organ It may also be macroscopic or may hav to be detected by section under the microscope **Etiolog** Generally fibrosis results from previous damage brought abou most commonly (1) by narrowing or occlusion of the coronar arteries and their branches by atheroma (2) Acute inflamma tions of the endo peri or myocardium Inflammation of an one layer generally involves the myocardium (3) Syphiliti diseases notably of the aorta with involvement of the coronar circulation (4) Rarely tuberculous infection

**Pathology**—Narrowing or almost complete occlusion o the coronary arteries may occur at their origin from the aort or the fine branches may be affected in their ramifications In the first event (in occlusion of big vessel) there might be formed a large infarct of the heart muscle to be gradually replaced by fibrous tissue in case the patient survives the attack In case of closure of smaller vessels multiple areas of fibrosis are common In thrombosis resulting from atheromatous changes and gradual fibrosis narrowing is slow in onset and there may be some anastomosis between the branches of the vessels of the heart not involved in the process Arteriosclerosis of the left coronary artery and its branches lead to fibro sis of the left ventricle particularly the apical portion The heart muscle becomes thin pale and hard and

wall In the affected area inside the ventricle thrombotic material is liable to collect Sudden rupture or aneurysm formation may occur from these fibrosed and thinned areas of the heart wall In coronary infarct of the heart muscle replacement fibrosis takes time and if the patient over exerts before complete fibrous tissue formation rupture of the heart muscle is possible In most of the valvular diseases there is some amount of gradual myocardial fibrosis When the septum is involved there may be heart block due to interference with the bundle of His Syphilis may also cause similarly heart block and other fibrotic changes due to secondary coronary disease from syphilitic mesoaortitis and aortic incompetence

**Clinical manifestations,** vary widely They may be due to (1) cardiac enlargement best detected by skiagram of the heart but in senile atrophy of the heart there may not be any enlargement even with considerable fibrosis (2) Circulatory inadequacy The first symptom may be persistent low tolerance for exercise Slight exertion such as hurry to catch a tram or a bus induce undue respiratory distress or even precordial pain Subsequently sudden heart failure supervenes without any apparent cause (3) Special signs and symptoms like heart block extrasystoles sensory symptoms like sub sternal pain or distress radiating down the inner side of one of the arms are common Dyspepsia flatulence attacks of faintness or dizziness are not infrequent

Mental changes like failure or impairment of memory may be also noted Heart sound may be altered in quality and when of a tic tac character it means considerable myocardial impairment Sometime reduplication of the first and second sounds cause the so called **gallop rhythm** and is of serious import and is frequently found in cardio renal combination of diseases

**Diagnosis** —This condition is more frequently overlooked than any other cardiac morbidity due probably to two reasons —(a) lack of time to obtain an accurate history of subjective complaints notably of unusual distress on physical exertion and (b) failure to detect the enlargement of the heart specially in cases with faint apical impulse and sounds For this in all heart cases specially with *suspicion of myocarditis* a *careful* history in particular relation with exertion and a careful examination for the size of the heart by clinical as well as radiological methods appear essential An electrocardiogram may be of special value In the presence of heart block chronic myocardial affection should be suspected

**Differential diagnosis —Fatty heart** is usually associated with general lassitude debility impaired digestive function may be a subnormal temperature and *symptoms of cerebral anaemia* are common The patient may be pale the first sound may be shorter in duration but sharp and clear the second

sound in the oartic area is less loud The size of the hear usually not so enlarged The cause of fatty heart namely ous poor blood conditions poisoning by abuse of alco during chloroform *anaesthesia acute fevers* etc are commoner previous history *following* fatty changes

**Myxoedema Heart**—In myxoedema and cretinism capacity of the heart to tolerate exercise is generally curta and the characteristics are enlargement of the heart a s pulse rate and suggestive electrocardiographic changes the typical clinical features and a high cholesterol content blood and lowered basal metabolic rate and therapeutic test treatment with dry extract of thyroid help to differentiate

**Deficiency of B vitamin,** particularly amongst chro alcoholics may cause difficulty but the history and may association of peripheral neuritis and other suggestive poi described under beriberi will help

**Prognosis,** varies considerably but as a whole the outlo is serious particularly when the disease is not diagnosed earl The condition being of a progressive nature and specially fro the the standpoint of etiology not very amenable to treatme the prognosis is rather serious Supervention of heart bloc or alternation of rate and rhythm or angina pectoris or sym toms of heart failure make the outlook gloomy The mo frequent cause of death is congestive cardiac failure Sudde death may be due to infarction rupture of the heart complet block heart failure etc

**Treatment,** will vary according to the cause and symptom discussed under various heads The other details are like thos in the treatment of endocarditis

# CARDIAC ENLARGEMENT

## HYPERTROPHY AND DILATATION

Enlargement of the heart may be due to hypertrophy or dilatation or as is generally seen due to both combined

In simple hypertrophy there is increased thickness of the heart muscle in one or more cavities of the organ and may include all the muscular structures and papillary muscles and others In dilatation the capacity of both the chambers of *the heart is increased*

**Etiology**—**Hypertrophy left ventricular** is a reaction to continued physiological demand Some of the commoner causes are (a) aortic disease (b) essential hypertension (c) thyrotoxicosis chronic nephritis **hypertrophy general** usually of both chambers diffuse chronic myocarditis severe and prolonged muscular exertion as in athletes in adhesive pericarditis notably

with extrapericardial fixation at times anaemia vitamin B deficiency rheumatic carditis chronic thyrotoxicosis etc all causing mostly left sided hypertrophy Persistent raised intra cranial pressure adrenal or pituitary tumours may also cause this

**Right sided hypertrophy** is produced in increased pressure in the pulmonary circulation such as chronic bronchitis and emphysema with pulmonary fibrosis mitral disease of a chronic nature specially steno is chronic congestive failure patent in terauricular septum pulmonary stenosis and incompetence and others

For the development of the full hypertrophy adequacy of blood supply and proper coronary integrity is essential

**Dilatation** —Clinically this may be physiological and pathological The former may be a temporary affair after sudden and severe mu cular exertion It may also occur as a compen satory mechanism in some varieties of chronic valvular disease like aortic incompetence

The left auricle in mitral stenosis the right ventricle in pulmonary and also in tricuspid incompetence and of right auricle in tricuspid stenosis and in this group there is also hypertrophy of the respective chambers

In pathological dilatation there is impairment of function and of tone of the heart muscle eventually leading to failure The affected chamber does not empty itself completely and as the dilatation increases the contraction of the chamber becomes less effective with increased stasis of blood

Dilatation may also occur secondary to simple cardiac hypertrophy following compensatory dilatation in chronic myocardial disease in chronic adhesive pericarditis coronary occlusion acute infective processes toxaemias in most forms of anaemia and cardiac strain

In cases of supervention of new cardiac rhythm notably when quick by cutting off diastolic rest period for heart lessens nutrition for overworked myocardium and thus may cause acute sudden dilatation the auricles are affected particular ly in auricular fibrillation

Most of the causes of hypertrophy when act very quick'y and all *on a sudden before there is time for hypertrophy* may produce dilatation This is specially the case where the muscle fibres are already damaged or poorly nourished But actually we can diagnose enlargement but to distinguish between dilata tion and hypertrophy may be difficult if not impossible

**Pathology** —**Hypertrophy** of the heart may be limited to one or more chambers or may be uniformly affected When the left ventricle is affected the apex-beat of the heart is wider in extent and is heaving in character and the first sound is accentuated and the whole organ is elongated and is rather

conical in form When the right ventricle is affected the h is more or less broader When the organ is very much enlar as in aortic incompetence it is often spoken as cor bovinu or big heart or ox heart

**Clinical manifestations**—The signs and symptoms vary according to the original disease giving rise to the hyp trophy or dilatation or in one word enlargement and according to the response made by the heart The details be dealt under valvular and other disease of the heart

**Diagnosis,** is made by clinical and X Ray examination the size of the heart Out of the signs and symptoms of hyp**trophy** probably are the heaving apical impulse of a sl sustained and steady type with the apex shifted downward m than outward enlargement of the heart

**Dilatation** may be confused with pericardial effusion but careful examination as detailed under the latter condition he to differentiate Here in dilatation the apex is more out th downward

**Prognosis** depends upon the original cause Hypertroph if the cause continues is likely to be followed by dilatation pathological cardiac dilatation the prognosis depends upon t cause the size of the heart condition of the myocardium an its blood supply and the nature and degree of cardiac *failu* and also its response to treatment.

**Treatment,** depends upon the cause Early recognition the condition and proper management should help In th presence of cardiac failure timely treatment in the usual lin may save the situation

# HYPERTENSIVE HEART DISEASE

## ESSENTIAL HYPERTENSION

**Definition**—This complex condition is generally associate with cardiac hypertrophy usually of the left ventricle as result of hypertension There may be chronic myocardia disease sometime associated with it

**Etiology**—(1) Hereditary tendency to development o hypertension is more common than otherwise It may follov Mendel s law of dominant and recessive characters (2) Faulty diet and frequent association with obesity Whether a high protein diet and a sedentary habit have got anything to do it i difficult to say *(3) Action of hormones appears to be defi* nitely involved in the etiology of hypertension Recently Wright relates to the development of renal ischaemia followed by release of a pressor agent in the circulation After renal ischaemia from whatever cause an enzyma renin is released

in the blood stream where it reacts with a plasma euglobulin (hypertensinogen) to form the pressor substance hypertensin (angiotonin) The pressor substance presumably acts directly on the vessel to cause a generalised arteriolar constriction and hypertension

(4) The connection between blood pressure and the emotions particularly anger and fear is well established Automatic stimulation of the sympathetic nervous system probably by release of adrenalin in the blood stream may raise the blood pressure (5) Long continued increased tension eventually produces degenerative changes in the intima and thickening of the walls of the arterioles.

The above five points are the probable causes of primary or essential hypertension For the other details the chapter on arteriolosclerotic kidney should be consulted Other causes which give rise to high blood pressure will obviously affect the heart

**Pathology**—The basic characteristic is the presence of cardiac hypertrophy with or without dilatation in the absence of any obvious or valvular lesion The left ventricle is most commonly affected Glistening white strands or patches of fibrous tissue are usually scattered throughout the myocardium particularly on the anterior wall of the left ventricle towards the apex and also in the interventricular septum Both may only be detected under the microscope In spite of the hypertrophy the driving force of the heart may be very poor In some there may be genuine hypertensive heart disease of gradual onset without much hypertrophy of the myocardium It is usually in cases of comparative sudden onset where hypertrophy may be commoner but the condition must be gradual with adequacy of coronary blood supply

**Clinical manifestations**—The patient usually an adult of nearabout or over 40 years of age of either sex may complain of those symptoms described under the head of essential hypertension or may be asymptomatic Breathlessness on exertion palpitation cardiac asthma precordial pain etc may be there But the *symptomatology* varies according to the competence of the myocardium and adequacy of coronary supply Supervention of failure symptoms alter the clinical picture accordingly

**On examination** the pulse may be slow due to heart block pulsus alternans indicating exhaustion of the myocardium or other types of altered rate and rhythm may be encountered The apex is more down than out specially when hypertrophy preponderates and may be more lateral than down in dilatation The apex beat may be wider heaving sustained and booming in character with an accentuated aortic second sound There

may be systolic murmur commonly at the apex occasionally the aortic area With onset of failure symptoms there may found other additional evidences Gallop rhythm pulsus ternans are grave indications The blood pressure is genera raised usually above 150 m m of mercury which may co down with the onset of failure and the diastolic figure m remain above 110 mm of mercury There may be retinal teriosclerosis and in nephrosclerosis findings diagnostic of th condition may be also be associated

**Diagnosis**—The age generally nearabout or above 40 w evidences of cardiac hypertrophy showing high blood pressu in the absence of any kidney or valvular disease are suggesti For other details see arteriolosclerotic kidney on pages 581 e

**Differential diagnosis—Chronic nephritis** generally affec persons below the age of 30 some history of kidney disease wi positive urinary findings such as albumin casts low speci gravity raised N P N content of blood retinal changes et should help The blood pressure is more stable in nephri than the labile variation common at the earlier stages of esse tial hypertension

**Chronic aortic disease** like incompetence in rheumatic grou the subject is younger with history of fleeting joint pain fev etc and also simultaneous involvement of mitral valve the wat hammer pulse the wide pulse pressure pulsating arteries th characteristic thrill and the diastolic murmur at the aortic are conducted down the sternum etc will help In grown u people without rheumatic history the question of syphilitic meso aortitis leading to incompetence should be considered seriously Simple atheroma may occasionally also produce it

**Thyrotoxicosis** common in females may show the typica staring eyes nervousness tremor palpitation sweating diar rhoea loss of weight low cholesterol content of blood etc and the raised basal metabolism will help

**Course**—This is usually progressive

**Complications** may be heart failure of the left side like cardiac asthma or congestive cardiac failure angina pectoris coronary thrombosis cerebral haemorrhage neuro retinopathy and hypertensive encephalopathy Adams Stokes syndrome rare ly uraemia Intercurrent infections are not uncommon and may be terminal

**Prognosis,** is unfavourable specially in the presence of marked enlargement of the heart or of failure symptoms or re tinosclerosis Adams-Stokes syndrome lastly cerebral vascular lesions may close the scene

**Treatment**—As in essential hypertension described under arteriolo sclerotic kidney

# "COR PULMONALE" OR HEART OF EMPHYSEMA OF LUNG

## (HEART OF PULMONARY HYPERTENSION)

**Definition** —Enlargement of the right ventricle due to obstruction in the pulmonary circulation or due to mitral disease with congestion of lung and increased pressure therein

**Etiology** —Due to chronic cough emphysema pulmonary fibrosis or in mitral disease or in pulmonary arteriosclerosis the right ventricle finds it increasingly difficult to empty into the lung vessel hence that chamber hypertrophies eventually to fail as pressure in the pulmonary circulation rises beyond the capacity of the right ventricle to propel as shown by dilatation of that chamber An acute right cardiac defeat with sudden *dilatation may occur in pulmonary embolism with involvement* of extensive areas

**Pathology** —There is first hypertrophy later dilatation of the right ventricle In tricuspid incompetence the right auricle also suffers and there is thus congestion and stasis in the pulmonary circulation specially on its venous side There may be atheroma of the pulmonary vessels Curtailment and reduction of vascular bed in lung due to emphysema and fibrosis shunts blood quickly without proper and adequate oxygenation and such blood cannot adequately nourish the myocardium hence the easy heart failure and cyanosis and others

**Clinical manifestations** —Symptoms like dyspnoea and hitherto absent cough may appear in some when there is early *failure of the right ventricle the associated right auricular con* gestion shows all the complaints of congestive cardiac failure detailed thereunder In acute embolic lesion of lung there may supervene symptoms of acute heart failure with pain dyspnoea may be rusty sputum or frank haemoptysis crepitations may be heard over the affected region by auscultation all suggestive of infarction in the lung

**On examination** in a competent right ventricular state nothing except a little dilatation of the heart as evidenced by skiagram or as the percussion note to the right of the sternum may not reveal the actual enlargement due to emphysema The pulmonary second sound is accentuated the blood pressure is usually near about 120/80 mm of mercury With the onset of right sided failure the apex goes externally the neck veins become prominent oedema of legs enlarged tender liver ascites oliguria crepitations at the base of the lungs may develop Haemoptysis may open up the safety valve for the time being atleast

**Course,** is usually progressive because the cough and chronic bronchitis have a tendency to progress on and go from bad to worse

**Complications,** may be heart failure of the left side cardiac asthma or more commonly congestive cardiac failure angina pectoris coronary thrombosis cerebral haemorrhage and others Intercurrent infections are not rare and may be terminal

The skiagram shows enlarged right ventricle Electrocardiogram may show right axis deviation or right ventricular preponderance In the acute type of embolic origin there is cyanosis dyspnoea *engorgement of veins and other signs* and symptoms described already The pulmonary second sound is accentuated and gallop or other rhythm like auricular fibrillation may also develop

**Prognosis,** is unfavourable in the presence of marked enlargement of heart or when failure symptoms retinosclerosis Adams-Stokes syndrome or others are also present Cerebral *vascular lesions may close the picture*

**Treatment,** should be directed to the chronic cough and the chronic bronchitis and emphysema In those cases where pulmonary arteriosclerosis (Ayerzas disease) is the underlying factor the treatment should be on the lines of hypertension Every effort should be made to stop the cough and bronchitis Breathing exercise to improve the emphysema and increase the *respiratory excursions of the lungs may be of some use* The rest is according to indication

## HEART FAILURE

It is on the integrity of the myocardium that efficient circulation depends hence when the defect is moderate or h impediment or pressure in some part of the circulation not sever enough to be unable to be overcome *the heart muscle undergoes* work hypertrophy by drawing on its reserve inherent in myocardium When it can no longer cope against these impediments it gradually begins to give way probably by stretching muscle fibres when failure symptoms begin to appear

Circulatory failure generally means an inadequate supply of proper oxygenated blood to the various tissues due to deficiency *of myocardial action or due to reduction of the volume of blood* sufficient to maintain proper circulation Circulatory failure may be of two principal types (1) cardiac failure (2) peripheral failure or vascular failure

## CARDIO CIRCULATORY FAILURE

Heart or cardiac failure is manifested as an inability of the heart to maintain *efficient circulation in all parts of the body*

either during exercise or at rest It might show two varietie (1) right sided failure or congestive cardiac failure or failure with congestion, the heart is unable to empty itself completely resulting in congestion in the venous side and the auricles (2) Failure with deficient circulation of the vital organs It may be (a) syncopal failure with ischaemia of the brain (b) anginal failure due to insufficient supply to the heart muscle by the coronaries.

## RIGHT SIDED FAILURE OR CONGESTIVE CARDIAC FAILURE

Definition —A condition of heart failure with passive venous congestion behind the failing chamber primarily due to inability of the ventricles to discharge their blood completely into the arteries

Etiology —Though the exact cause nature and mechanism of heart failure may not be very clear yet we know the two important factors at work are (1) **some impediment in the course of circulation e g valvular defects, or raised pressure or resistance in any part of circulation leading to stasis or some back pressure** (2) *Defect in the myocardium,* all valvular defects specially of chronic nature are associated with variable myocardial damage *and change And also heart diseases caused by (1) rheumatic* (2) hypertensive (3) syphilitic (4) degenerative (5) toxic including thyrotoxicosis (6) infective (7) renal heart (8) arteriosclerotic including coronaries and lung vessels (9) congenital and (10) miscellaneous

Recent methods of investigation have shown that in heart failure the **circulation time is delayed,** when it falls to half the normal oedema of the extremities specially of the inferior ones may appear Due to stasis the venous pressure also rises As a result of failure to contract efficiently there is stasis in distal parts an unequal filling of the cavities with unequal distribution throwing strain on some of the chambers others going less filled than normal Hence congestive cardiac failure may be (a) *right ventricular* (b) *left ventricular* (c) **mixture of both** This again may occasionally be (a) **acute but more commonly** (b) **chronic in nature**

**Clinical** manifestations —**Acute** cardiac failure usually takes place during the course of **acute illnesses** for the detail of which acute myocarditis should be consulted Under chronic myocardial disease acute failure may result from sudden defeat of the heart or to the switching on to an abnormal rhythm such as auricular fibrillation or flutter and so on the latter quick rates cause *failure* by not allowing rest and adequate filling up of the ventricles besides other factors

**Acute right heart failure** may show subjective symptoi like dyspnoea or orthopnoea heavy or tender liver The ne veins are prominent and may be pulsatile also The apex *further left and displaced laterally* and cardiac dullness exten to the right of the sternum A compensatory polycythaem is common Later on develops the full fledged picture of l congestive cardiac failure to be discussed later on

**Acute left heart failure** —The patient may have paroxysn of dyspnoea notably nocturnal called **cardiac asthma** and acu oedema of the lung with abundant frothy sputum, which ma be pinkish in colour with accentuation of the pulmonary secon sound indicating hypertension in this lesser circulation In le: severe cases there may be only oedema at the bases of the lung: The rhythm may be altered to gallop rhythm or pulsus alte nans or fibrillation all indicating serious nature of the mischie:

**Insidious and chronic right sided decompensation**

**Etiology** —(a) Mitral disease commonly stenosis (b) pul monary diseases like chronic bronchitis emphysema fibros lung chronic bronchitis etc Rise in pulmonary pressure (c) A a result of left sided failure (d) Congenital pulmonary stenosi

As emphasized already the failure is essentially myocardi.l the latter being affected by chronic rheumatic fever or in coronar changes or due to anoxaemia inseparable from chronic pul monary disease all affect to the disadvantage of the myocardiun which when are too much for the ventricle to stand agains failure results The **effects** are dilatation of the right chambers of the heart with congestion as the propelling power of the right ventricle becomes deficient stasis takes place in the venous re turn leading to engorgement of the neck veins pas ive conge tion of the liver because here though the arterial blood supply is more or less adequate the venous outflow being deficient th inevitable outcome congestion results The venous pressure in *general thus rises every where and when the stasis becomes* marked due to various factors and anoxia increased intra capil lary pressure and altered nutrition and permeability of the endo thelium contribute to the formation of cardiac oedema

**Clinical manifestations —Subjective** The patient with insi dious failure generally notices first that those efforts which he could formerly undertake without any dyspnoea now evokes breathlessness very easily and it takes longer time to recover from that breathing difficulty This a sociated with or may gra dually develop to palpitation easy fatigability (lassitude) pre cordial pain or distress etc Later dyspnoea occurs on slight exertion

**Cyanosis** is common probably is due to anoxia and anoxae mia Apex of the heart is shifted laterally and the borders of the organ are widened the neck veins become engorged enlarged

tender liver the latter may be pulsatile with tricuspid incompetence oedema of the dependant parts ascites There may also be *oliguria and the urine may* be loaded with urate crystals the circulation time is prolonged the rhythm might be altered gallop and auricular fibrillation being commoner

## LEFT SIDED FAILURE

**Etiology.**—(a) Hypertension (b) Aortic disease commonly incompetence occasionally stenosis (c) *coronary disease* (d) thyrotoxicosis (e) rare cases of markedly raised intercranial pressure and others

**The effects** —There is dilatation of chambers of the left side of the heart mainly the left ventricle Pulmonary congestion initially during exertion and subsequently even at rest occur The pulmonary artery dilates Increased work for the right ventricle thus makes that chamber to fail in its turn sooner or later

**Clinical manifestations** —Some of the earlier symptoms may be lack of concentration or inability to work after meals giddiness fainting attacks heavyness after meals formation of too much of gas in the stomach may be with vomiting diarrhoea abdominal pain oliguria albuminuria In some there may be paroxysmal attacks of nocturnal dysynoea called **cardiac asthma** due to sudden defeat of the left ventricle The patient wakes up suddenly at midnight feels suffocated sits up struggling or breath and finally falls back perspiring and exhausted This is probably due to central anoxaemia-caused by slowing of the rate of circulation and insufficient pulmonary ventilation The medullary centres not getting their optimum supply of oxygen though they do not require so much oxygen during sleep yet when the supply is beyond minimum workable limits there is a reaction in response to supply more oxygen by general vaso constriction with resultant pallor and the left ventricle is urged to work harder than lies in its power causing its sudden partial or temporary *defeat leading* to oedema lung These subjects also generally have hypertension coronary disease chronic myocarditis etc There are usually no signs of systemic venous congestion the apex is generally downwards and outwards. The pulse may show pulsus alternans **On auscultation** there may be a soft systolic murmur at the apex the rhythm might be gallop in character the pulmonary second sound is accentuated There might be evidences of congestion as shown by crepitations at the bases of the lung The circulation time is also delayed

**Cheyne Stokes breathing** may also be present specially in hypertensives The **gallop rhythm** is diagnosed by the presence of a third heart sound during or late diastole and the sounds

may resemble like lub lub dupp Graphic records indicate that the first part of the first sound is presystolic and likely to be of auricular origin This third sound known as the presystolic the extra sound may be caused by the vibrations of a rapidly filling ventricle which has lost its tone In other cases the third sound may be heard as a diastolic impulse The three sounds are evenly spaced and the third sound is only heard when the rate is rapid This is of very grave significance Presystolic gallop is of graver significance than the protodiastolic gallop in the latter the third sound closely follows the second sound as lub dupp dupp This is not of much significance being an accentuation of the third heart sound and is best heard near the apex whereas a split second heart sound is best audible at the base of the heart

**Diagnosis**—At the initial stages the diminished tolerance to exercise and signs and symptoms of cardiac enlargement and other clinical data help to establish the diagnosis. **Congestive cardiac failure or right sided failure** is diagnosed by the venous engorement enlarged tender liver dyspnoea combined with other signs and symptoms of organic heart disease

Organic heart disease is distinguished from **neurocirculatory asthenia or effort syndrome** by the absence in the latter of organic cardiac findings and the breathlessness is more marked during emotion than during effort Other causes of oedema is distinguished by the absence of findings suggestive of organic heart disease For the details the chapter on Epidemic Dropsy and Nephritis with Oedema should be consulted

**Course** depends on the underlying basic lesion giving rise to the failure and also on the length or duration nature degree etc and response to treatment

**Prognosis**—The immediate prognosis depends on the degree nature and severity of the failure In cases with considerable reduction of cardiac reserve and with grave venous engorgement and considerable oedema the immediate prognosis is serious if not grave Death from the first attack of failure is uncommon Though cases might improve considerably under proper treatment the eventual prognosis generally depends upon the cause of failure and where considerable myocardial damage with much reduction of reserve power means bad prognosis whereas without much myocardial affection the prognosis is fair though the expectation of life may be somewhat limited Secondary infections specially of the lung are very serious during the acute stage of failure and should always be guarded against

**Treatment**—The principles involved are (1) **rest,** (a) physical and mental and specially for the myocardium (b) digitalis group of drugs by reduction of the ventricular rate

give rest to the myocardium (c) minimise the cardiac strain as far as practicable by reducing hypertension where present by reduction of venous engorgement by venesection digitalis and reduction of body weight where the patient is obese (2) Supply of proper blood and oxygen to the myocardium by (a) making the patient inhale oxygen at a brisk rate (b) supplying glucose to the heart muscle by intravenous injection (c) coronary dilators like euphyllin group of drugs given orally or intravenously improve the blood flow in the myocardium (d) improvement of the blood condition by correcting anaemia hypoproteinaemia etc (e) reduction of blood volume and oedema by mercurial diuretics

(3) **Symptomatic treatment —**

The patient should be at absolute rest propped up to give him maximum comfort This posture helps by not only allowing the fluid in the abdomen to gravitate down thus allowing the diaphragm a greater play and movement but also the accessory muscles of respiration can have a better play specially when there is a heart table in front **Oxygen should be given wherever possible by a mask** The nasal catheter method of giving oxygen though not very satisfactory yet one should aim at giving inhalation of oxygen bubbling through an intermediate Woulfe s bottle containing warm alcohol at a rate so fast that the bubbles may not just be counted

**Digitalis group** may be given in numerous ways but the best probably is some solid preparation because one has seen considerable variation in counting and in the size of the drops when tincture has been used But the regular use of a minim glass may obviate this difficulty

**Tincture digitalis** in half a dram doses but must be freshly prepared and potent every six hourly till the desired effect may be of use in mild cases But in severe cases massive digitalisation may be of use Here one and a half dram dose is given initially to be followed by one dram every six hourl till the desired result is got But this treatment by massive digitalisation requires almost constant supervision of a doctor and may be unsuitable for cases where heart block might be suspected notably in heart failures with slower rates

Digoxin (a glucoside derived from digitalis lanata) in 1 to 1 5 mgm initially followed by half a mgm every six hourly until the desired effect and a maintenance dose of one tablet equivalent to 0 25 mgm twice daily appears adequate

During digitalis therapy constant watch should be maintained for undue slowing or appearance of coupling of beat both indicating stoppage of the drug Undue nausea vomiting headache etc indicate toxicity of digitalis and require either reduction or discontinuance of therapy

**For venous engorgement** which generally means that the veins supplying the heart muscle itself find difficulty in emptying themselves inside congested right auricle hence the myocardium itself is congested and digitalis group of drugs might take undue time to produce desired effect hence it is always more effective when about six to ten ounces of blood is let out from a vein in the elbow or by the application of half a dozen of leeches on the liver region, by relieving the congestion of the myocardium appear to help the quicker action of digitalis notably in auricular fibrillation when associated with failure In very urgent cases after venesection or along with leeching intravenous injection of glucose with one two hundredth or one two fiftieth of a grain of strophanthin combined may save very urgent cases of failure to be followed up by oral digitalisation

When there is **marked oedema common salt and water** the latter also contains sodium ions, hence should be restricted because increased of blood volume is undesirable in failing heart Saline purgatives help by liquid motion and thus eliminate fluids Diuretics in the form of diuretin grains three to five thrice daily or in obstinate oedema or where the patient though better is still dyspneic or when a skiagram of the chest shows hazy shadow of both bases of lung **mercurial diuretics** like neptal or esidrone or salyrgan group of drugs initially half a c c preceded by suitable doses of ammonium chloride to render the urine acid and subsequently in two c c doses intramuscularly after the half c c test dose shows no extra sensitiveness do a lot of good

**Cardiac asthma** or paroxysmal nocturnal dyspnoea require when urgent morphine sulphate one fourth to one sixth of a grain and atropine sulphate one hundredth of a grain given subcutaneously the latter to counteract the depressive effect on the respiratory centre and thus may give prompt relief In less urgent cases sedatives like phenobarbitone or luminal one to two grains combined with one fourth to half grain of codeine phosphate may be of relief Coronary dilators and hypotensives in hypertensive states are of value **Insomnia** should be combated by suitable hypnotics either of the barbiturate groups or by bromides and others

**General Management**—General hygienic measures are of great importance specially in cases with oedema and breathlessness because the former condition by lowered tissue resistance is conducive to easy sepsis and infection and the dyspneic patient often with cough unless has got a *clean mouth* and upper respiratory tract there is always danger of aspiration pneumonia and other troubles The mouth should be kept clean so also the skin notably its pressure points should receive

cue and adequate care by application of spirit drying and by proper powdering

The bowels should be kept regular and for this notably in the presence of high blood pressure divided doses of calomel at night followed by saturated solution of mag sulph one ounce in the following morning may be of considerable use

*Diet* —As adequate diet raises basal metabolism and throws additional strain on the heart it is advisable to give not more than 1000 calories per day and this should constitute of small dry concentrated feeds little at a time every few hours with restricted salt and water As the patient s general condition appetite and desire for food improve along with establishment of cardiac compensation the quantity may be gradually increased *But here too small concentrated feeds as regular intervals are more suitable* and bulky meal or overfeeding is risky and may precipitate a relapse Total fluids should not preferably exceed fifty ounces per day

The question of leaving the bed requires proper judgment and until all the signs of congestive cardiac failure have completely disappeared the patient should not be allowed to move about *After the patient can freely move for his usual* routine obligations such as washing bathing and answering natures calls he should be gradually given properly graduated walking exercises within the limit of tolerance of the myocardium and just short of breathlessness or tired feeling to build up cardiac reserve

**Instructions to the mode of life** The fact that the patient must live *within the limits of his myocardial strength need be* properly impressed upon About nine hours rest at night and about an hour of rest after noon meal and avoidance of all over-exertion may do good by keeping him going longer than expected He should have to use digitalis group of drugs nd on more or less throughout the rest of his life

When the blood pressure is high every effort should be made to keep it within reasonable limits where possible

## PERIPHERAL CIRCULATORY FAILURE

**Mechanism** —So far have been considered conditions of cardiac failure due to some defect in the heart itself but in this present condition the failure is mainly in the periphery Due to the dilatation of the peripheral arterioles causing failure of venous return to the heart there is a corresponding diminished cardiac output This may result from one or several of the following (a) Loss of fluid from the body as in heat stroke purging or vomiting or by leaking of blood into the capillaries such as in surgical shock as in burns

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one or several of the following (a) Loss of fluid from the
body as in heat stroke purging or vomiting or by leaking of
blood into the capillaries such as in surgical shock as in burns

injuries crushed wounds etc (b) Stagnation of blood in the systemic capillaries from (i) nervous effects as in vasodilatation of vasovagal attacks or of primary shock (ii) Through the action of toxins in acute infections like diphtheria pneumonia subtertian malaria black water fever enteric fever etc (c) Severe haemorrhage internal or external etc.

**Effect**—Due to diminished cardiac output the pulse is feeble with fall of blood pressure regular but quick the skin is pale and cold, peripheral cyanosis and due to diminished venous return and reduced cardiac output a compensatory tachycardia and a pulse of low volume and tension with consequent cerebral anaemia result

**Treatment** Principles—(1) Increase the venous return to the heart by (a) raising the foot-end of the bed with bricks or blocks and (b) bandaging the limbs starting from the periphery towards the trunk very tightly (c) Massage and kneading of the muscles specially of the extremities

(2) Blood volume should be increased by saline injection but better is transfusion of blood in haemorrhage and plasma in burns and other conditions of haemoconcentration as in burns cholera and in persistent vomiting etc.

(3) Stimulants of the peripheral circulation (a) Adrenalin chloride and ephedrine sulphate half to one c c of one in thousand solution of the former and one fourth to half grain of the latter due to its sustained action given intramuscularly may be of use This might have to be repeated according to indication (b) Cardiocirculatory stimulants of the niketha mide group in 1 to 2 c c doses every four to six hourly subcutaneously may be of use also (c) In suprarenal cortex we have got a very powerful remedy which improves and sustains the peripheral circulation with some lasting effect The commoner preparations are eucortone or percorten cortigen doca cortin and others eschatin in suitable doses of 1 2 or 3 c c given intramuscularly or in urgent cases intravenously slowly and properly diluted may be of much help (d) To keep the patient warm by suitable hot water bottles blankets and judicious electrical devices where available may also do good

## ATTACKS OF SYNCOPE

### (Syncopal failure Fainting attacks)

Temporary unconsciousness due to deficient cerebral circulation

The causes may be (1) heart block with a very slow ventricular rate usually falling below 20 to 30 per minute and usually in complete block Cardiac asystole in heart block complete or incomplete (2) Rare cases of ventricular fibrillation where sudden death due to absence of coordinated ventri

cular contraction is likely (3) Rapid ventricular rate when above 200 per minute there is hardly any cardiac output and the diastolic rest to the heart is very little occurring in some case of (a) paroxysmal tachycardia and (b) auricular flutter (4) Some cases of aortic stenosis or regurgitation specially on exertion (5) In coronary diseases like angina pectoris or coronary thrombosis

## VASOVAGAL ATTACKS

**Synonym** —Gower s syndrome or medullary syndrom originally described by Gowers the mechanism appears almost the same as in fainting attacks but they generally show premonitary symptoms like lassitude restlessness and even an anxiety state The world may appear unreal the limbs may feel cold epigastric or respiratory difficulty may be evident The pulse may be slow and gradually grow fainter till to be impalpable with it comes on unconsciousness It is commoner in middle aged persons and one attack predisposes to others

The commoner causes are anaemia low blood pressure change of posture overactive carotid sinus reflex heart block and other causes described under syncope

**Differential Diagnosis.—**

**Epilepsy** shows aura and falls anywhere and everywhere injures himself bites the tongue or passes urine and faeces under him the pulse is not altered and the signs and symptoms of vasovagal attacks are absent

**Hypertensive encephalopathy** usually shows more hypertension than any heart disease and the higher the blood pressure the more is likely to be the risk of this condition supervening There may be headache hemiplegia monoplegia paresis aphasia etc

## CORONARY DISEASES OF THE HEART

### CORONARY THROMBOSIS

**Synonym** —Coronary occlusion cardiac infarction

**Definition** —Occlusion of a branch of the coronary artery usually causing cardiac infarction and associated not uncommonly with aseptic pericarditis over the affected area

**Etiology** —The occlusion may generally be produced in the following four ways — (1) Arteriosclerotic narrowing of the coronaries may be a part of generalised areteriosclerotic heart disease with atheroma may be associated with hypertension diabetes mellitus excess of body weight and others As in some cases of primary or essential hypertension (2) Thrombosis of an already arteriosclerotic artery (3) Syphilitic meso aortitis affecting the root of the aorta and at times sealing the mouth of

the coronaries (4) In rare cases of embolus from the vegetation of a valve or rare other sources may block a vessel

Though the exact cause of this arteriosclerosis is not clear yet excess of stimulation of the vagus nerve causes liberation of acetylcholine at its nerve endings a substance whose injection has been said to produce medial degeneration of arteries with subsequent sclerosis There appears an increased importance of the causal relation between gall bladder disease and coronary sclerosis both supplied by the vagus nerve

**Pathology** —The common sites of thrombosis are (1) the anterior descending branch of the left coronary artery supplying the area covering the anterior part of the interventricular septum and part of the left ventricle including the apex (2) Less commonly circumflex branch of the left coronary and (3) branches of the right coronary are not very commonly affected When right coronary is involved the infarct includes the posterior part of the interventricular septum and posterior part of the left ventricle with little or no involvement of the anterior part of the left ventricle If death is instantaneous no infarct is seen The areas are irregular in shape pale yellow in colour, often surrounded by a red zone The larger areas may undergo softening and any effort may cause rupture of the heart at these weak points If the patients survive there is scarring of the effected area or aneurysmal dilatation of the heart muscle may follow and its rupture may also cause sudden death There is usually a nonseptic serofibrinous exudate on the outer surface of the heart giving a friction sound on auscultation over the affected area and is very suggestive of the diagnosis of cardiac infarction

**Clinical pathology** —**Pain** In coronary narrowing when there is insufficient blood supply to the myocardium specially on exertion a relative ischaemia occurs and the pain is felt so long the exertion is continued and may disappear on taking rest Likewise a continuous ischaemia caused by sudden occlusion of the coronary by thrombosis give continuous pain because the heart goes on beating but the ischaemia is more or less permanent due to infarction as a result of thrombosis

Though there are others who suggest that distension of the arteries may be the cause of pain yet the above is probably the accepted view In cases of coronary infarction without pain there is probably gradual fibrosis of the myocardium of a chronic nature rendering the nerves nonsensitive partly being enclosed in the fibrous tissue

Occasionally a rough loud atypical murmur may be heard and is probably due to rupture of the part of necrotic interventricular septum *or one of the chordae tendineae* *Rupture of* the septum is often accompanied by thrill The **leukocytosis** is due to the formation of a so called aseptic abscess in the heart

muscle The fever is difficult to explain but may be partly due to acute necrosis of the myocardium and is more demonstrable when a rectal than an oral temperature is taken

**Clinical manifestations**—**Age,** though said to be commoner between the ages of 50 to 60 years yet cases are seen at thirties Commoner in males than in females He may give history of short attack of cardiac pain after exertion or on strenuous exercise suggesting coronary narrowing which may be thrombosed easily Overweight younger people may also be affected

**Onset**—**Though commonly sudden and takes place at rest,** yet may be gradual also The other signs and symptoms will naturally depend not only on the size of the vessel affected but also on the health and integrity of the myocardium because an already fibrosed muscle may not evoke much pain though affected massively

**Pain**—The types of pain may be different though generally severe and continuous may be of increasing intensity or may be agonising or an oppression or burning or rarely even griping in character

*Site*—Though generally precordial over the sternum may be in the epigastrium when may be mistaken for acute abdominal conditions the pain has a tendency to radiate to the left side of the arm and neck or to both the sides

It is associated with symptoms of **shock** like sweating low feeble pulse marked dyspnoea which is highly suggestive may also be associated with nausea and vomiting The pain usually persists for hours and for a few days also If the patient survives the immediate shock and cardiac failure such subsequent developments **like slight leukocytosis, mild fever** and others might develop

**On examination** the patient is generally restless during the attack sweating may be profuse the extremities may be cold and clammy He may be cyanosed and dyspnoeic The pulse is usually weak and varies generally from 90 to 100 per minute The **heart** may show no abnormality except that the sounds may appear feeble There may be abnormal or altered rhythm as block The blood pressure is as a rule low and the usual systolic pressure being nearabout 80 to 100 mm of mercury In some cases the signs and symptoms of heart failure such as congested liver prominent neck veins etc may appear and sometime suddenly In cases with myocardial fibrosis there may be much dyspnoea without definite pain in coronary thrombosis Due to nonseptic exudate over the infarct **a pericardial rub may develop,** in a day or two following infarction and may be very helpful in the diagnosis ***The temperature generally rises up to*** 100°F or a little higher usually lasting for 3 to 5 days from the

onset *Slight leucocytosis of 10 to 15 thousand or a little mor* per cmm may also be suggestive of the diagnosis

**Electrocardiogram**—Though in a few cases no change may be noted in the electrocardiogram at the initial stages yet this is very helpful in the diagnosis Shortly after the thrombosis changes are seen in the S T interval and in the T waves in lead I and III In apical infarcts the S T sector is elevated above the isoelectric line (high take off) and the T wave is inverted in lead I with opposite effects in lead III These changes are reversed in basal or posterior wall infarcts in leads I and III Later on the S T sector gradually tends to reach the isoelectric line but the inversion of the T waves persists for some time

**Diagnosis**—The combination of precordial pain lasting for more than a few minutes generally longer with shock and dyspnoea in a person over 40 or in an obese of near about 50 should mean cardiac infarction unless otherwise proved An *electrocardiogram where available is of definite use But the* leukocytosis and fever following this condition sometimes cau confusion but that they occur in coronary thrombosis should always be remembered The sedimentation rate of the red cells is increased

**Rupture of a medico legal aneurysm** may cause difficulty in diagnosis and may be that previous history of pain for a prolonged period hypertrophied heart murmur in the aortic area might help in the diagnosis of an anurysm X Rays are invaluable

When coronary thrombosis pain occurs low down in th upper abdomen such conditions like perforation of duodenal ulcer or acute pancreatitis or biliary colic or in mild cases severe indigestion may be simulated Under these conditions a careful history usually points to their respective conditions such as indigestion pain after meals colic etc Whereas in coronary thrombosis an elderly person may have had history of effort angina or angina pectoris supervention of shock pain dyspnoea cyanosis and signs of cardiac dilatation alteration of rhythm or other signs of cardiac involvement and subsequent fever and leukocytosis and above all an electro cardiogram where possible will clear up the difficulty

**Course**—About 25 percent die in the first attack in a few minutes to a few hours may be from shock acute cardiac failure ventricular fibrillation asystole of the heart and others Sudden death in human beings within a short time is due generally to heart conditions and this and other cardiac states are commonly responsible for such sudden deaths As cases vary in severity all processes of investigation notably by electrocardiography help to detect mild and atypical cases If the patient survives pro

gress is very slow may be for weeks and months and he should lead a restricted life although recovery may be almost complete

| | Coronary thrombosis | Angina pectoris | Effort Angina or non occlusive Coronary disease | Acute abdomen |
|---|---|---|---|---|
| 1) *Onset* | At rest usually sudden may be gradual | during exercis | during or after exercise | Usually sudden with vomits |
| 2) Restlessness | Marked | Absent he is still motionless | May be slightly restless | If peritonitis restlessness not marked |
| 3) *Pain Site Location character* | Substernal or abdominal Half an hour or longer sense of oppression ache heavyness or rarely burning | Precordial<br>Brief a few minutes only the sense of heart caught in a vice | Precordial<br>Pain after or during exercise passes off at rest<br>Resembles pain of coronary thrombosis | Abdominal Stationery and does not extend to the chest |
| 4) *Shock etc* | Marked with sweating and feeble pulse | Not marked No sweating or very little | Usually none or very little | Rigidity of abdominal muscles & shock present. |
| 5) *Blood Pressure* | Usually fall | Rises | May not be affected | Liver dullness obliterated and no cardiac syndromes |
| 6) Dyspnoea | Present may be pronounced | Very little | May be slight | Usually nil but according to cause Silent to auscultation |
| 7) *Subsequent fever & Leukocytosis* | Present | Nil | Nil | Fever longer Leukocytosis marked |
| 8) *Pericarditis* | May be present | Nil | Nil | Nil |
| 9) *Heart failure* | May be present | Usually Nil | Usually Nil | Nil |
| 10) *Inhalation of amylnitrite* | Does not relieve does harm | Relieves | Usually unaffected | No effect |

**Complications** are congestive cardiac failure pericarditis cerebral thrombosis or embolism Rupture of the heart or an aneurysm of the myocardium may not be common but occurs He may subsequently develop angina pectoris the attack of which may be repeated

**Prognosis** —Coronary thrombosis occurs in a large percentage of cases of angina and may be terminal About fifty per cent of cases of genuine coronary thrombosis die ultimately of

Out of those recovering from the immediate effect about 40 ercent die in three to four years In a small proportion of cases eath takes place within a week or thereabout after the onset ess *than half of the surviving cases get a second and occasional* a third attack Proper treatment and careful regime have portant bearing on the ultimate outlook of the patient

A few may live with considerable restriction of tolerance to ercise with partial curtailment of myocardial reserve In mild ses enough recovery to return to a quiet occupation not en ling hard work may be in the lot of a few but relapses are obable The severity of an attack is shown by the character gree and duration of the pain nature of shock and cardiac latation marked fall of blood pressure alteration of rhythm d rate complete heart block rupture of the myocardium a ignosed by unusual rumbling murmur sudden death etc may se the scene

**Treatment,** is mainly symptomatic and resolves itself into t **local focal and general, and also coronary dilators, and urishment to the heart etc**

**Rest —Absolute typhoid rest, may have to be propped up**

**Pain** —In the acute stage **morphine sulphate one fourth in or one third grain in overweight** people with one hundred one two hundred of a grain of **atropine sulphate given** sub aneously and repeated five to six hourly where required ecially in the presence of great pain and shock may be of nsiderable relief In presence of cyanosis or dyspnoea to ke **the patient inhale oxygen** at a brisk rate and **injection of ethamide group** of cardio circulatory stimulants in one to c c doses and later on intravenous injection of glucose with onary dilators like euphyllin group in 5 to 7 gr doses may good The patient should be on a **restricted diet** of about **e hundred to thousand calories** and the initial food regime ould consist of small sips of milk glucosewater and fruit ce each alternating and in limited amounts Congestive diac failure indicate the use of digitalis group of drugs as ailed under the treatment of cardiac failure

The essential part of the treatment is **to afford prolonged t and spare all efforts for about six to eight weeks or** longer that the scar may be hard and strong For the other detail should lead a regime somewhat akin to cases of serious diac failure Coronary dilators with cardiac stimulants may e to be continued for some time even during the latter part convalescence

The subsequent return to work should be very gradual and tious and in steps of guarded gradual exercise short of gue and exertion Prevention of recurrences is also portant

# ANGINA PECTORIS (HEBERDEN—1818)

**Synonym**—Stenocardia breast pang sternalgia etc

The word angina means a sense of suffocation pectoris means of the chest or any disease or symptom characterised by spasmodic suffocative attacks The lay meaning in dictionary of angina is quinsy The celebrated John Hunter Charcot and many noted doctors suffered from it

**Definition**—A condition characterised by paroxysmal attacks of (agonising pain usually substernal may be suffocative in character) associated with changes in the heart aorta or the coronaries brought on by exertion and relieved on rest

**Etiology**—The theories are (1) the pain is mostly probably due to sudden interference with coronary circulation caused by spasm of these vessels with consequent anoxaemia resulting in an acute ischaemic cry of the myocardium This probably results from accumulation of chemical metabolites which are irritants normally but again relieved and washed out by adequate coronary supply **(Lewis)** The immediate exciting cause may be hurry or exertion after a meal exposure to cold mental excitement or hurry to catch a train etc (2) **Mackenzie** thought the pain to be cardiac in origin the ventricular wall being less distensible than normal specially during strain (3) **Allbutt** considered that the pain was due to spasm of the first part of the aorta the cry of pain of a diseased aorta —death following vagal inhibition (4) **Verdon** suggested that distension by gas of oesophagus and the stomach could account for the symptom

**Pathology**—(1) Coronary narrowing due to atheroma or narrowing of the coronaries at their origin in syphilitic meso aortitis and myocardial fibrosis due to coronary insufficiency It may follow acute illnesses like influenza malaria etc Rheumatic fever by involvement of the aortic valve at its later stages may cause coronary insufficiency (2) Some cases of severe anaemia (3) Spasm of the coronary arteries (4) In some cases of extreme rapidity of the ventricle reducing diastolic period thus causing coronary insufficiency (5) Aortic disease both stenosis and regurgitation

The myocardium is often fibrosed *mostly due to insufficient* coronary circulation for reasons given already If the patient dies in an attack the heart is usually found full of blood and the musculature relaxed

**Clinical manifestations**—The condition generally runs in certain families and appears to be commoner in persons used to hard and strenuous life

it Out of those recovering from the immediate effect about 40 percent die in three to four years In a small proportion of cases death takes place within a week or thereabout after the onset Less than half of the surviving cases get a second and occasionally a third attack Proper treatment and careful regime have important bearing on the ultimate outlook of the patient

A few may live with considerable restriction of tolerance to exercise with partial curtailment of myocardial reserve In mild cases *enough recovery to return to a quiet occupation not entailing hard work* may be in the lot of a few but relapses are probable The severity of an attack is shown by the character degree and duration of the pain nature of shock and cardiac dilatation marked fall of blood pressure alteration of rhythm and rate complete heart block rupture of the myocardium as diagnosed by unusual rumbling murmur sudden death etc may close the scene

**Treatment,** is mainly symptomatic and resolves itself into **rest local focal and general, and also coronary dilators, and nourishment to the heart etc**

**Rest —Absolute typhoid rest may have to be propped up**

**Pain** —In the acute stage **morphine sulphate one fourth grain or one third grain in overweight** people with one hundred to one two hundred of a grain of **atropine sulphate given** sub cutaneously and repeated five to six hourly where required specially in the presence of great pain and shock may be of considerable relief In presence of cyanosis or dyspnoea to **make the patient inhale oxygen** at a brisk rate and **injection of nikethamide group** of cardio circulatory stimulants in one to two c c doses and later on intravenous injection of glucose with coronary dilators like euphyllin group in 5 to 7 gr doses may do good The patient should be on a **restricted diet** of about **five hundred to thousand calories** and the initial food regime should consist of small sips of milk glucosewater and fruit juice each alternating and in limited amounts Congestive cardiac failure indicate the use of digitalis group of drugs as detailed under the treatment of cardiac failure

The essential part of the treatment is **to afford prolonged rest and spare all efforts for about six to eight weeks or** longer so that the scar may be hard and strong For the other detail he should lead a regime somewhat akin to cases of serious cardiac failure Coronary dilators with cardiac stimulants may have to be continued for some time even during the latter part of convalescence

The subsequent return to work should be very gradual and cautious and in steps of guarded gradual exercise short of fatigue and exertion Prevention of recurrences is also important

develop coronary thrombosis which is usually terminal Other gradually pass on to increasing everity or to myocardial failure r may die of cerebral vascular accidents inseparable from the incidental hypertension

**Complication** —Coronary thrombo is is very common Cerebral haemorrhage or thrombosi acute oedema of the lung may occur

**Diagnosis** —The on et durin exertion or on expo ure to cold etc taking place not at rest the typical motionless fixed posture and the agonising pain of hort duration in the absence of shock dy pnoea etc help to differentiate from coronary thrombosis Please see the chart of differentiation unde coronary occlusion

**Differential Diagnosis Cardiac neurosis** commoner in women apart from exertion and the patient is usually re tle s in tead of being still and motionles palpitation is usually pre sent and generally does not feel well in between the attacks Examination of the heart and the circulation seldom reveals anything abnormal

*Cardiac pain of intense anaemia* due to poor quality of blood or in hyperthyroidism or in hypothyroid conditions may vaguely resemble angina but a careful crutiny of the details specially of the history and the attack when analysed help to clarify the difficulty

**Abuse of tobacco** may cause cardiac pain but the patient is usually restless during attack may complain of palpitation and the fine tremors typical of oversmoking and other points suggest the diagnosis

*Coronary thrombosis is discussed under that head already*

**Intercostal neuralgia** abdominal colic are not difficult to differentiate with proper and careful history and examination

**Cour e** —In some patients death may follow an attack and that for the first time In others attacks recur with increasing everity and progressive myocardial weakness develops

**Prognosis** is uncertatin udden death occurs in about 60 percent of the rest a few recover while others have repeated attacks at intervals of even up to 20 years or longer and ulti mately dying of heart failure or coronary thrombosis or inter current disease Cases occurring on slight exertion or during night or the presence of pulsus alternans indicating severe myocardial damage are of unfavourable prognosis The everity of a case can partly be judged by the amount of exer t on which excites an attack The actual ize of the heart and electrocardiographic evidence sugge tive of myocardial damage specially with marked narrowing of the coronary are of seriou import

***Geographical distribution*** **—It appears less common tropics and warm countries than in colder countries** In Engla and Wales 1062 deaths occurred from it in 1916 In the Unit States of America there were 5914 deaths in the registrati area in 1917 from it

Age etc —The patient usually a man **over 50 years** of a though cases are occasionally seen at early thirties femal seldom suffer Jews are said to be more prone a life worry and anxiety and strain particularly amongest the upp classes are commoner subjects

**The Attack** —In the presence of the exciting facto *mentioned already the attack is precipitated There is sudde* agonising pain starting usually beneath the upper part of the ste rum may rediate to the left shoulder down the ulner side the left arm and the left side of the neck jaw or scalp rarel may radiate to the right side The pain is agonising continuou non throbbing and is described by the patient as con trictin and oppressive so much so as to be described as if the che is caught in a vice During this time there is severe menta anguish and a sense of impending dissolution

**Duration of the pain** —Attacks differ considerably in dura tion and severity Generally the pain is more a subjectiv phenomenon, hence the intensity is more marked in nervou and excitable individuals than on the severity of the myocar dial ischaemia Sometimes there are repeated attacks of pai status anginosus a state of angina with attacks of repeat *ed fury follow one another lasting for minutes*

Sometime during the attack passage of large quantity of urine or after eructation the attack terminates

**Physical Examination during attack** —The patient is pale *very much scared silent and motionless may be flushed or may* groan in agony The pulse rate may be unaffected or may be feeble The blood pressure rises and the systolic may be up to 300 mm of mercury or more in some or in othe it is unaffected *The heart may appear all right on average* examination In a few death follows in an attack due to vagal inhibition or ventricular fibrillation Lung may show emphysematous wheeze or oedema during an attack

**In between the attacks** —The subject is usually a sufferer from arteriosclerotic changes and hypertension Tender spots may be found over the precordium and along the left arm immediately following an attack **Electrocardiogram** taken shortly after an attack manifest changes comparable to those seen after coronary occlusion of a lesser degree Later on the electrocardiogram returns to normal The W R of blood may be positive in some

**Course** —Most cases of *angina nearly two thirds may*

**Pathology**—The valve most commonly affected in almost all cases of rheumatic fever at its initial stages is the mitral then follows the aortic occasionally tricuspid and rarely the pulmonary This though is the naked eye picture yet when seen under the microscope in section almost all the four valve at their attachment to cusp ring are found more or less to be involved in most cases

In the mitral and the aortic valves the changes being progressive are easily visible in the others the lesions are generally non progressive The lesion probably results from bacteria carried to the valves by their blood vessels or the organisms may settle on the valves from the blood stream flowing in the heart Verrucose warty vegetations as opposed to the big and flowery friable vegetations of the sub acute bacterial endocarditis form on auricular surface of the mitral and the ventricular surface of the aortic valves occasionally this spreads to the wall of the left auricle or ventricle or to both called **mural endocarditis** When there is an associated congenital lesion the right heart may also be involved Emboli may be carried to the different parts of the body All the components of the heart namely the pericardio and myocardium and the chordae tendineae and the valves are involved hence is called **rheumatic carditis** formerly called pan means all carditis Recent idea is besides carditis actual *valvulitis also occurs in rheumatic hearts*

**Microscopically**, the picture is one of valvulitis as well as of endocarditis Many new vessel form in the thickened valve and inflammatory cells group themselves in relation with the vessels There are also Aschoff s nodules but less numerous than in the mycardium already detailed under rheumatic fever on page 373 There is oedema later fibrosis causing the scarring and the vegetations form on the edge of the valves

**Vegetations**, grow like this —The endothelium over the cusp degenerate specially along their line of closure ultimately it (endothelium) is soon lost Platelets and certain amount of fibrin are deposited on the raw surface Fibroblasts and capillaries begin to appear and invade the vegetations and eventually become changed to granulation tissue and finally get indistinguishably blended with the thickened valves

*The result* is that the cusps ultimately become firm fibrotic and rigid when the chordae tendineae are involved the process is still worse leading to improper closure of the edges of the valves and also some consequent myocardial change causing the various valvular mischief with impediment and embarrassment to the circulation It is mostly the obstacle in the way of circulation and associated myocardial damage which ultimately lead to easy heart failure

**Treatment —During attack,** immediate inhalation of amyl nitrite (2 to 5 minims) or chewing of tablets of nitroglycerine (glyceryl trinitrate) in one hundredth to one two hundredth of a grain doses give prompt relief Subjects of angina pectoris should always carry capsules of amyl nitrite or nitroglycerine tablets On the remotest feeling that an attack is impending not only should the patient stop all exertion but also always inhale the capsule of amyl nitrite broken under a handkerchief or chew a tablet as suggested

**To prevent recurrences** all the exciting causes known to provoke an attack must be avoided If exertion is unavoidable he might undertake the same with a tablet of nitroglycerine under his tongue Those cases who show pain even on slight exertion and confirmed by electrocardiogram that the coronary *narrowing is pronounced should preferably have complete* rest in bed for some period when he should be treated by euphyllin group of coronary dilators with glucose to improve myocardial nutrition Probably C vitamin may be of some use in this direction

**Surgical and other therapy** —Surgical intervention by various ways specially by sympathectomy have been tried but as the condition is progressive they may not be of much use To limit the pain impulses from reaching the brain has met with only partial success Thyroidectomy has only been of partial success also

The various attempts to increase the blood flow through the myocardium are being tried

In cases of attacks without having amyl nitrite at hand one may try 1 to 2 ounces of brandy or whisky with some relief of pain If this fails an injection of morphine and atropine sulphates in one fourth and one hundredth grain of each respectively may do some good Inhalation of chloroform has been tried with some success Carminatives may be tried with some relief

# DISEASES OF THE ENDOCARDIUM

## *(ACUTE SIMPLE ENDOCARDITIS)*

**Synonym** —Acute benign endocarditis rheumatic endocarditis etc

**Definition** —An acute infective inflammation of certain parts of the endocardium running a comparatively benign course

**Etiology** —The commonest cause is **rheumatic fever chorea or scarlet fever** the last is uncommon in India Occasionally it may follow or occur during attacks of tonsillitis diphtheria pneumonia measles etc In cases of long standing valvulitis recurring endocarditis may occur

**Complications**, are pericarditi pleurisy but most important the involvement of the myocardium the most vital element n the heart In some subacute bacterial or even acute or lcerative endocarditis may supervene Later on failure symp oms etc come with progre sive impediment to the circulation by hese valvular defects but still more important baneful effect robably comes through the progres ive myocardial damage

**Prognosis** depends on the site nature r currence of the isease and the response and the nature of treatment

**Progressive cases** do badly in the long run as they gradually orsen Children fail to grow properly and re urrences of rheu matic fever cause great handicap Adherent pericarditi or brous pericarditis or aortic incompetence may cause enormou ypertrophy of the heart drawing initially on the myocardial re erve leading ultimately to failure The ultimate progno i artly depends on the efficiency of the myocardium left out after epeated attacks of damage Seriou damage at younger ag ith persistence of rheumatic attacks make the outlook seriou Patients only showing valvular mischief without much myocar ial damage and failure and with signs of cessation of activity f rheumatic fever make the outlook better and uch patient may ve longer Involvement of sub acute or ulcerative endocarditi re usually fatal complications but lately penicillin used for 14 lays continuously appears to bring a ray of hope in thi hopele ondition

**Treatment** —As there are no pecifics known symptomatical y the following lines of therapy should be followed

*Rest —Absolute and typhoid rest in lying position paring* ll efforts as in all forms of endocarditis should be for prolonged periods and this should be extended to 3 to 6 months or longer otably with obviou cardiac involvement Some believe in rying salicylates in big doses and others show confidence in ulphonamides both of which probably are of some use The bed rest should be continued so long as all evidences of active heart trouble have not ceased

**General measures** —These should be as in cases with pro longed rest in bed including attention to bowe s oral hygiene avoidance of bed sore proper diet with adequacy of vitamins to ensure nutrition etc The anaemia requires treatment by iron and other remedies C vitamin may be of special use If the home urroundings are unhygienic effort should be made to get uitable ventilation proper diet nursing and others

**Symptomatic treatment.**—The fever and joint pain demand large doses of salicylates preferably the natural preparation in 30 to 40 grain do es three to four times a day with double th amount of alkalies to protect the gastro intestinal tract from ir ritation and appear useful It seems to have no action on the

**Clinical manifestations**—*This is the commonest form of endocarditis* A young adult during the course of illness enumerated above and under the head of rheumatic fever under infections at the earlier pages see page 372 between the ages of 5 to 25 the following suggest the involvement of the heart (1) Recurrence of tonsillitis or sore throat (2) May be slight extra rise of temperature (3) The resting pulse rate specially during sleep is unaccountably high and that persistently (4) Lack of energy loss of weight and may be persistent joint pain etc (5) Anaemia and leukocytosis (6) The apex of the heart is diffused and forcible and is little outside than is expected in a normal child (7) A soft systolic murmur or slaping first sound or loss of clearness of the first sound and undue accentuation of the pulmonary second sound may suggest early mitral disease and later on after a few recurrences of rheumatic attacks the involvement of the aortic valves may be suggested when loss of clearness of the aortic second sound or a systolic murmur or frank symptoms of aortic incompetence appear (8) Alteration of rhythm may be due to extrasystoles or heart block both indicative of myocardial damage (9) Presence of rheumatic nodules in other parts of the body see page 378 (10) all the layers of the heart are involved hence it is almost always **rheumatic carditis**

**On examination** in a typical advanced case the patient shows that either he is propped up or dyspneic with a respiration rate *which is increased and is aneamic may be cyanosed and the* respiration rate increasing on slight exertion

The **pulse** at the initial inception of the endocarditis may be unaccountably quick or slow due to block or irregular owing to extrasystoles **The heart** is enlarged the apex beat outside forcible and the sounds of the myocardium weak murmurs may be there Pericardial rub may be present also when a simultaneous pericarditis is present Embolic phenomena may come later on in successive attacks because rheumatic heart disease **almost invariably recurs,** except under rare circumstances an this is the real and great danger to the heart ***as it (heart) gradually gets worse structurally and consequently functionally also***

**Blood**—Anaemia generally microcytic may be pronounced slight leukocytosis say nine to twelve thousand per cmm quick sedimentation rate of the red cells is common Blood culture is usually negative

**Skiagram and the Electrocardiogram may** suggest a mitral *involvement*

**Course**—The valvular lesions specially in rheumatic variety is progressive manifesting usually after few attacks mitral stenosis though less commonly the aortic and occasionally other valvular lesions

to the wall of the heart and called mural endocarditis valve and the aortic are commonly affected the chordae cae may also be involved

*icroscopically* the vegetations consist of amorphous masses ed platelets and fibrin with bodies of bacteria on their sur ience the blood culture is likely to be positive whereas it ative when the bacteria are buried under the mass of

There are numerous large mononuclear cells infiltrating junction of the vegetations along with the cusps and ucleated cells resembling the Aschoff s bodies are also met

Fibrosis and calcification are not unusual specially in ic cases

**Iyocardium,** shows mainly (a) collection of polymorphonu leukocytes resembling minute abscesses (b) Sometimes ff s bodies are present (c) Haemorrhages under the peri im is common but pericarditis is rare

**Embolic phenomena** —For the details clinical portion also l be seen The kidneys appear fleabitten (multiple glo lar embolisation see page 574 ) For infarct in the spleen other organs see corresponding paragraph of acute endocardi the next chapter

The other symptoms such as heart failure have already been ibed

**Clinical manifestations** —Next to the commonest rheumatic carditis *this is the second common condition* *The patient* ly a young adult male might have passed through mental physical strain usually notices gradually increasing weakness ig exertion which tends to develop into dyspnoea on ex n *loss of weight slight fever may be with perspiration and* symptoms There may be evening rise of irregular fever mes with periods of remissions and intermissions Pains aches in muscles and joints and even swelling of the joints not uncommon In some embolic phenomena like a tende able spleen may be with perisplenitis or haematuria due enal infarct or in right sided or in congenital cases a pul ary infract with pain and haemoptysis and occasionally with l friction rub may the first sign to attract attention

**On examination** the complexion is sallow due to anaemia ptococcal toxaemia fever etc The fingers may be clubbed ll painful emboli as red spots not unlike mosquito bites uently seen on the volar aspect of the terminal phalanges of fingers and the sole of toes are very suggestive The perature generally varies from 99 to 100°F and that may for weeks with some weeks of apyrexia intervening The se even at rest may be about 100 to 120 per minute It is ally *soft and compressible* and generally of rather low pres

heart lesions but probably by amelioration of the mother disease it might prevent recurrent damage The joint should be kept at rest and application of warmth may be gratifying

**Heart failure**—As already suggested besides absolute rest in bed thus ensuring physical rest, mental rest is also essential *When failure* symptoms appear proper treatment by adequate doses of degitalis group of drugs preferably by injection as the condition is likely to be acute and as delays in such conditions are dangerous appear essential Intravenous glucose in large doses and inhalation of oxygen flowing at a brisk rate may be of use

**Convalescence**—The rest should be prolonged enough to ensure complete recovery of the myocardium Even after complete subsidence of acute symptoms and active disease the period of bed rest should extend up to 4 to 6 weeks at least better longer Septic foci in teeth tonsils and other areas need eradication Supervention of subacute or acute endocarditis demand proper lines of treatment

**In subacute cases or in chronic cases** manifesting more or less nonprogressive valvular diseases with involvement of most of the layers of the heart with or without cardiac failure also demand the above lines of treatment but probably not with such prolonged rest

## SUBACUTE BACTERIAL ENDOCARDITIS

**Synonym**—Endocarditis Lenta

***Definition***—*A progressive inflammation of the endocardium* or parts of it with a prolonged subacute course

**Etiology**—The organism in 95 percent of cases is streptococcus viridans and the sources are usually hidden but infection in tonsils or throat are the commonest and may be also from the intestinal respiratory and genito urinary tracts The entry of the bacteria into the system is generally quiet and insidious

**Predisposing factors**—Age—20 to 40 years commoner in male Strain may be of war or of hard life or any other strenuous exertion previous rheumatic valvulitis or congenital cardiac defects specially valvular defects of mitral valves is commoner *and appear to favour its grafting*

**Pathology**—Lesions may be (1) cardiac though mainly valvular (2) embolic and (3) general

**Cardiac Lesions** are more proliferative than destructive with large friable polypoid vegetations very different from tiny firm warty vegetations of rheumatic group They originate along the line of contact i e to the proximal aspect of cusp Though the whole cusp may be affected some are occasionally calcified also A typical characteristic is the tendency for the vegetations to

without heparin seem to have cured a few cases But sufficient interval must be given and the patient watched for a few years till he may be pronounced as cured

With adequate dosage and that for a prolonged period the blood culture usually becomes negative in a few days and the spleen becomes impalpable with a striking general improvement Unless the treatment is continued at least for four weeks to a month or longer the exact period of which only future will guide there is a likelihood of a relapse and even apparently quiescent cases may die of congestive cardiac failure due to extensive damage to the myocardium and impediment of circulation by damaged valves Earlier the diagnosis is made and the treatment instituted the better is the result

## ACUTE BACTERIAL ENDOCARDITIS

**Synonyms** —Ulcerative endocarditis malignant endocarditis etc

**Definition** — A very acute bacterial inflammation of endocardium or of its parts accompanied by embolic phenomena

***Etiology*** —*The commonest causative organisms are strepto* haemolyticus staphylo aureus pneumo or gonococci or pfeiffer's bacilli The organisms enter the circulation from hidden foci in the teeth tonsils gall bladder appendix etc when it is called **primary** or from obvious sources like boils carbuncles osteomyelitis puerperal sepsis etc. pneumonia group of infections typhoid fever diphtheria otitis media and other infections in the prostate gland of males etc when it is called **secondary** form There is usually an old valvular lesion rheumatic or congenital or otherwise and on this is grafted an acute destructive process not only of the valves and the endocardium or the wall of the heart but also in the distal organs where the emboli lodge themselves and the organisms multiply resulting an arterial pyaemia

***Pathology*** —*The* valves and the endocardium are the main sites of affection Vegetation form on the valves where are in apposition and the auricular aspect of the mitral and the ventricular surface of the aortic cusps are almost equally affected Though the lesion is common on the left side of the heart yet in the congenital and gonococcal varieties the right side alone or also may be involved *There are two main features of this* valvular mischief (1) The valvular lesion are usually very large and exuberant and hence **vegetations very friable** (2) **Marked destruction** so that the cusps are perforated or largely ulcerated away and the chrodae tendineae destroyed rarely the interventricular septum and the heart wall may be perforated

**Microscopically** the picture is one of acute suppuration of the cusps being crowded with neutrophil leukocytes

**Heart** may show nothing abnormal initially but later a little dilatation with a systolic apical murmur may be all that is found for some time Later may appear an aortic diastolic murmur and its appearance is very suggestive of endocarditis and advance of the pathological process

**Blood**—There is slight leukocytosis of near about nine o ten thousand per cmm with microcytic hypochromic anaemia Culture of about ten c c of the patient s blood taken aseptically during an active febrile stage may be positive but sometime this may have to be repeated several times to get a positive result

**Emboli** may cause the symptoms described under acute variety of this disease and the favourite sites are the (a) spleen (b) kidneys (c) brain (d) skin and others

**The spleen** is usually palpable and may be tender in some

**Course**—The disease may extend up to one to two years but is usually fatal ultimately But recent treatment with penicillin heparin and others appear to have modified the course for the letter in certain percentage of cases

**Complications** are mostly embolic phenomena with their after effects

**Diagnosis** may be quite difficult specially early in the disease but irregular fever undue tiredness lassitude pains and aches in the joints and muscles with an apical systolic murmur may be with a palpable spleen not due to commoner causes in this part of the world viz Malaria Kala azar with slight leukocytosis are suggestive Involvement of the aortic valves helps But positive blood culture and embolic phenomena are only definitely diagnostic

**Differential diagnosis**—Other details of this are discussed at the end of acute endocardities

Any patient showing valvular disease when develops pyrexia without obvious cause should be suspected to have developed subacute bacterial endocarditis and proved by repeated blood culture The presence of embolic phenomena considerably confirm the diagnosis

In the absence of definite valvular lesion difficulty may arise from enteric group of fevers tuberculosis deep seated pus under pressure chronic malaria kala azar etc and these are discussed under acute bacterial or ulcerative endocarditis in the next chapter

**Treatment**—Until recently before the advent of the sulphonamides and penicillin the outlook of these cases was uniformly grave Though sulphonamides only produce temporary improvement in a limited number of cases yet penicillin for at least 28 to 15 days continuously by drip method or by three hourly injection of about 5 to 10 lakh units per day with or

uncommon, specially in the gonococcal variety The temperature tends to come down before death hence a low temperature in a gravely ill patient should be taken seriously

**Blood.**—Leukocytosis in acute cases of near about 15 to 40 thousand and in subacute cases 9 to 12 thousand per c mm is the rule **Blood culture is essential** The urine may show red blood cells also pus cells occasionally frank haematuria albuminuria and also the causative organism

**Physical examination**—**General Appearance** Loss of flesh and a peculiar muddy *anaemia in our coloured skin and* not the coffee with milk complexion of the white people is seen Arthralgia is common in long standing cases clubbing of the fingers may develop Undue optimism is said to be common as in pulmonary tuberculosis

**Course**—The course is *usually rapid in the pure cardiac* type the patient may linger for several weeks The embolic phenomena when severe may be regarded as complications

**Diagnosis**—The diagnostic triads are (1) **clinical evidence** of endocarditis such as irregular remittent fever unduely quick pulse murmurs in the heart anaemia emaciation arthralgia leukocytosis and others (2) **Embolic phenomena** detailed already (3) **Positive blood culture** The first two when present should suffice The diagnosis should not be definitely given unless one is somewhat positive as the condition is almost invariably fatal

**Differential diagnosis**—Almost all febrile conditions might present difficulty and need differentiation The commoner diseases to be differentiated are mentioned below

**Simple endocarditis of rheumatic type** shows marked joint symptoms and the course is benign and emboli are rare and blood culture is generally sterile and the leukocytosis very slight and other evidences of rheumatic fever will help But the course usually is prolonged

**Enteric group** are differentiated by usual insidious onset the pulse rate is comparatively slow in comparison with the temperature notably during the first few days The dull heavy feature the tongue the abdominal symptoms and the absence of heart murmurs leukopenia positive blood culture to typhoid bacilli during the first eight days or so of fever later a positive Widal *reaction help to differentiate*

**Septicaemia**—The absence of the findings in the heart and embolic phenomena with leukocytosis a positive blood culture may be with chill rigor pallor etc and swinging temperature in the absence of any findings in the heart should lead us to think of pure septicaemia

**Miliary tuberculosis** may be diagnosed by positive findings in the lung hurried respiration rapid emaciation with leuko

**Embolic Abscesses** are formed in all parts of the body specially in the skin spleen brain kidneys retina and in the lungs in right sided heart lesions Both the kidneys may be riddled with minute abscesses a condition known as **pyaemic kidney** *The general clinical and pathological picture at the time of death is one of acute pyaemia*

**Clinical manifestations**—In the course of some acute illness such as osteomyelitis carbuncle pneumonia puerperal fever or otitis media or *spontaneously with or without a previous valvular* disease this form of acute or malignant endocarditis may be grafted According to the clinical features and with the predominance of certain signs and symptoms the following clinical varieties *have been described* (1) **Cardiac type** *The patient is ill* showing high remittent and irregular temperature may be with perspiration and rigor the cause of which is not apparent The unusual frequency of resting pulse rate should prompt a careful examination *of the heart and the lungs* *In the absence of any* definite physical signs in the lungs but on the contrary a dilatated heart and varying cardiac murmurs should suggest endocarditis

*Generally progressive* (1) ***anaemia and embolic phenomena like (a) painful tender spleen*** may be with infarct and perisplenitis or (b) **petechiae or red spots on the skin** often mistaken for mosquito bites (c) **tender discoloured areas on the skin** may be in the phalanges *or in other parts* (d) **haematuria or blood cells *in the urine*** with albuminuria rarely pain round the loin (focal glomerular embolisation or pyaemic kidney) may suggest the diagnosis (e) **Cerebral emboli leading to paralysis of various types** ***may be*** *hemiplegia* and others (f) ***sudden retinal dysfunction*** etc are important diagnostically

(2) **The septic type**—A primary focus in the form of a carbuncle or osteomyelitis is apparent with the involvement of *the heart He becomes gravely ill with a quick pulse rate* very fluctuating temperature perspiration rigor etc Variable murmurs appear in the heart in the mitral or in the aortic area Embolic phenomena are diagnostic

(3) **Typhoid type**—*Continued pyrexia drowsiness mental* dullness may be an associated diarrhoea simulate enteric group of fevers But the cardiac valvular and embolic manifestation and a leukocytosis and a positive blood culture should settle the *difficulty*

(4) **Cerebral type**—In these cases the clinical picture may simulate that of meningitis There is pyrexia delirium and *even coma and the local findings in the heart may not be very* marked except a very quick pulse

**Pyrexia**—Though irregularly remittent fever is the commonest type met with *yet high* regular quotidian fever is not

ial or ulcerative or malignant variety generally with a short rmy course But all the recent views favour the idea that ite simple or benign or rheumatic endocarditis and the sub ite bacterial or endocarditis lenta appear really to be the nifestations of the same fundamental process probably used by streptococci of low virulence as proved by positiv od culture in many cases of subacute endocarditis (lenta) and ely from rheumatic variety also Often endocarditis lenta ows on cases of rheumatic endocarditis imperceptibly the er ending with the commencement of the former The gro s vular lesions in benign endocarditis is though of a milder and

*Differentiation of different forms of endocarditis* —

| | Acute Benign *rheumatic* | Subacute or lenta | *Acute bacterial or ulcerative* |
|---|---|---|---|
| Cause | Usually rheumatic | Streptococci of low virulence | Strepto-haemolytic staphylo pneumo gono-cocci and others |
| Age Sex etc | Usually five to twenty five years rheumatic age | Twenty to forty years may have a previous rheumatic history | May be of any age |
| History | Rheumatic fever commonly | Rheumatic with fever aches and pains | In the course of acute diseases septic or infective |
| Short clinical idings | Tonsillitis fleeting joint pain associated with fever heart involvement tendency to recurrence etc | Quick pulse palpable spleen embolic phenomena in leukocytosis though slight only | Usually high fever remittent or intermittent may be sweating chill heart murmurs emboli very common Four usual clinical types |
| Pathology | Verrucose warty adherent and not friable vegetations Emboli not so common | Bigger friable emboli common | Big flowery easily detached emboli very common Heart riddled and may be ulcerated Embolic pyaemia common |
| Course etc | Long recurrent extending to years generally immediately fatal | One to two years or longer not uniformly fatal before penicillin | Usually six weeks were always fatal but for recent penicillin therapy |

re chronic fibrotic nature and appearance yet the microscope eals Aschoff s nodules in about 11 percent of cases of lenta

pena absence of *embolic phenomena and* a *negative* blood culture may be with typical lung findings in skiagram should help The typhoid like and meningitic forms of miliary lesions show *none of the findings of acute endocarditis*

**Malaria**—Uncomplicated benign tertian and uqartan infections present very little difficulty But in subtertian irregular *fever without much chill or rigor and the presence of headache* bilious vomits slight icterus may be a palpable spleen parasite ir blood leukopenia and therapeutic test by anti malarials by *curing the fever help in the matter Whereas none of the posi*tive findings of endocarditis are present

**Meningitis**—In cerebro spinal fever the cerebral *manifestations* start shortly after fever the intense headache mental dullness later on stiffness of the neck Kernig s sign a positive lumber puncture finding usually with turbid spinal fluid and negative findings in the heart help in the differentiation

**Undulant fever** is distingui hed by the regional distribution prolonged pyrexia *without the expected emaciation* with *lack of* findings in the heart the development of agglutinins in the blood should clarify the difficulty

***Typhus group*** *of fevers are distinguished by the* sudd n onset the typical rash the subsequent course and features specially the development of Weil Felix reaction of blood are helpful *diagnostic* features

**Prognosis**—The patient seldom lives more than several weeks after the diagnosis is established Usually it was a ix weeks course before penicillin and others There may rarely b an apparent intermission though recovery is very unlikely, but the *modern penicillin* and streptomycin *therapy might be* tried with some effect Out of 149 cases in a series 66 died of heart failure 23 in coma 19 had sudden deaths uraemia in 18 *exhaustion in 8 hyperpyrexia in 2 Cases of coma were mostly* due to cerebral embolism Sudden death may be caused by rupture of the cusp of the valves etc

**Treatment**—Absolute rest in bed removal of sepsis and continuous and big doses of penicillin given for a prolonged period *might* be *tried* with some effect For other details see treatment of Endocarditis Lenta in the previous chapter

## SUMMARY OF ENDOCARDITIS

The three clinical conditions described already under endocarditis are not equally common The commonest i the acute benign *generally caused* by rheumatic fever more in the young the least fatal form the next common is the serious but with a better outlook under modern prolonged penicillin therapy is *the* subacute bacterial endocarditis (*endocarditis lenta*) and lastly fortunately the least common is the very fatal acute bac

:ory of arterial disease may be also due to chronic focal sis or with metabolic disorders like gout lead poisoning or alcoholics diabetics etc There is thickening of the valves l atheromatous changes in the arteries The valves may d more commonly to regurgitation than to stenosis.

Under the heading of **chronic endocarditis** are generally cribed as already said **two inflammatory types** of endocar s of which about 70 to 80 percent being caused by chronic urrent **rheumatic infection** affecting most commonly the tral valve and less frequently the aortic About 10 percent these cases are probably caused by syphilitic lesion leading aortic incompetence from meso aortitis causing eventual onary and cardiac insufficiency and others The primary ndition is degenerative and has a tendency to run in some mem s of certain families after advanced age They cause vari *le damage to the reserve power of the myocardium*

# VALVULAR DISEASES OF HEART

## MITRAL DISEASE

## MITRAL STENOSIS

**Definition** —Narrowing of the mitral valve

**Etiology** —In about 90 percent of cases it is due to rheuma : endocarditis The signs of stenosis may not be evident till onths or years have rolled on, after the acute rheumatic tack or may be after recurrences It may also follow infections ke scarlet fever rare in India influenza diphtheria etc ccasionally it may result from atheromatous conditions in per ons of past middle life may be with or without nephritis

**Pathology** —As already said under chronic endocarditis iere is narrowing of the valve ring usually funnelshaped in hildren and buttonhole types in adolescents and adults Blood ishing through such rigid funnels or slit specially through the rmer produces the characteristic presystolic thrill and murmur he thickened and sclerosed cusps may be so rigid that the alve can neither open nor close properly giving rise both to tenosis and incompetence with the so called *double mitral* urmur The left auricle instead of holding 30 to 40 c c of lood may contain even as much as 500 c c in bad cases and enormous in size and cause paralysis of the left recurrent aryngeal nerve through pressure And it may appear on the ight side of the heart on a X Ray picture It may also pro luce occasionally displacement of oesophagus well demonstrated oy a X Ray plate taken in lateral posture The right ventricle by having to pump in an over distended pulmonary circulation having already raised pressure becomes *hypertrophied to*

whereas in 87 percent of rheumatic hearts proving more o[r] their etiological identity

As in congenital lesion of the aortic valves so also the v[alves] rendered more vascular by rheumatic lesion may pave the [way] for subsequent streptococcal infection of the sub-acute ty[pe] endocarditis

The acute bacterial endocarditis or malignant form is ge[neral]ly a hyperacute destructive disease caused by all sorts of bac[teria] characterised by marked valvular and endocardial lesions widespread embolic phenomena high fever and a comparat[ively] short course generally ending fatally

## CHRONIC OR SCLEROTIC ENDOCARDITIS

Chronic or sclerotic endocarditis is associated with increase of connective tissue in the segments of the valves other parts with subsequent contraction

**Etiology & Pathology**—(1) This may be secondary chronic simple acute or benign endocarditis of rheumatic or causing extensive myocardial changes mostly evident in mitral valve leading to stenosis The forms are (a) **fun[nel] shaped adhesion** of the cusps with broader end towards auricules is **seen commonly in children** (b) **Buttonhole o[r] slit like apperture** of the mitral valve is common in adolesc[ents] or adults. Next of these commonly affected are the ac[rtic] valves The tricuspid or pulmonary valves are affected ei[ther] congenitally or in relative incompetence due to widening of rings rarely due also to rheumatic infection **When in a h[eart] there is both mitral and aortic lesions notably in a young per[son] it is likely to be rheumatic in origin** Rheumatic endocard[itis] as already said under that heading causes widespread chan[ges] not only in the valves but also in all the structures includ[ing] most important the myocardium along with peri and endoc[ar]dium chordae tendineae etc Such sclerosed mitral valves l[ead] to stenosis later on to regurgitation mostly due to relative dila[ta]tion or to both So also are the effects in the less commo[n] or subsequently affected aortic valves

(2) **Syphilitic maso aortitis** common in adults with acqui[red] syphilis i a common cause of aortic incompetence in an ad[ult] without any evidence of mitral lesion The adverse effects [s]uch a le ion on the coronary circulation etc has already b[een] discussed under the coronary disease of the heart and will further detailed under aortic incompetence to be dealt wi[th] sub equently

(3) **Primary endocarditis** without any history of inflamm[a]tory lesion of the valves is usually **degenerative in character** T[he] subjects are generally males of past middle life with a fam[ily]

is usually in its normal place, palpation reveals short slapping or forcible apex beat and a presystolic harsh vibrating apical urring) thrill may be felt Percussion (usually not to be ie) may show the cardiac dullness to be extended lateral rds but a skiagram of the heart is the best to see its size

**Auscultation,** the first sound at the apex is accentuated or pping and the second sound a little weak The pulmonary ond sound is generally accentuated because of congestion and pertension in that circulation discussed already

The characters of the late diastolic or presystolic murmur nges considerably according to the various stages of mitral no is the rate and force of the heart beat and other factors convenience this may be described under stages

**First Stage**—When presystolic murmur localised and ited to the apex heard after some physical exercise specially *en auscultated with the patient lying on the left side When* de to inhale 3 to 5 minims of amyl nitrite may also reveal a herto absent murmur

**Second Stage**—A definite rasping rough low pitched scendo (rising) presystolic murmur ending suddenly in an entuated first sound at the apex It may be intensified when patient lies on his left side There is usually pronounced entuation of the pulmonary second sound

**Third Stage** in which mid diastolic and presystolic and haps an early diastolic murmur is audible at the apex cially when the stenosis is marked the early diastolic rmur is due to flow of blood from the left auricle to the ven le before actual systolic contraction of the auricle begin addition to these diastolic murmurs a systolic murmur is heard at the apex indicating also incompetence of the ral valves. Both the first and second sounds at the apex y alter their character or even be partly or completely re ed by murmurs

**Fourth Stage**—In this there are usually symptoms of car c failure and stasis in the systemic veins may be with irre arity of pulse due to auricular fibrillation Though generally pulse is quick in slow rate of the heart the presystolic mur rs may disappear and early diastolic murmur may be softer ugh this and the mid diastolic murmur may persist and in nd rate may occupy the whole of diastole Blood pressure dings show a little systolic but a somewhat raised diastolic ding The loud or reduplicated pulmonary second sound is nmon notably before the failure symptoms appear The ralysis of the left recurrent laryngeal nerve may be due to essure of the greatly dilatated left auricle usually with some arseness of voice

**Skiagram**—Antero-posterior shadow in typical cases of

dilate eventually with signs and symptoms of congestive ca failure There is usually thrombus formation notably in left auricular appendage which on detachment may cause bral, renal or splenic or other types of embolism In sided auricular thrombosis there may be pulmonary emb notably with auricular fibrillation not an uncommon late i of mitral stenosis Thus though in rheumatic endocarditis is not much embolic phenomena as the vegetations are hard nonfriable yet these emboli of blood clot are real dangers an uncomplicated case the left ventricle may not be much a ted at all because there is no extra strain thrown on it an the contrary it has got to handle lesser quantity of blood usual

**The Effects** generally of mitral stenosis are those of ve congestion with most marked effects in the lungs where hae ptysis and later on the **heart failure cells** shed in alveoli are countered In failure the congestion of the liver causes organ to be of **nutmeg appearance** under the microscope

Due to chronic congestion and sometimes extravasation blood there is pulmonary fibrosis the lungs looking firm brown hence called **brown induration of lungs** Due pulmonary hypertension and strain in that circulation ther hyperplastic sclerosis of the pulmonary arterioles and necr similar to those found in renal arterioles in malignant hypert sion The thickening of the basement membrane of supporting alveolar epithelium and vascular endothelium ca the space between them to be widened by oedema thus interfer with gaseous exchange explaining the extreme persistent **cyan** in some cases inspite of the improvement of the heart conditi

**Clinical manifestations**—The patient more commonly girl or a young person may have had a rheumatic history few months or years back or without such history and withc any complaints in a compensated case or may complain palpitation dyspnoea on exertion cyanosis later on with on of failure slight oedema round the ankles specially towar the evening after the day s work notably when ambular She may volunteer the history of an attack of **haemopty** during exertion and after which she felt better for the time bein

**On physical examination the pulse** is quick of sma volume sustained and of good tension There may be mitr facies of flushed cheeks coloured lips with slight cyanosis of th lobules of the ear tip of the nose and the lips but not common ly well seen in coloured people as in the white persons

In uncomplicated cases the patient is pale and often puny, and is sickly in appearance owing to smaller amount of blood going to the aorta to supply the whole system

llat on Auricular fibrillation may be of short duration ally but tends to be permanent later on each new bout of llation causing greater degree of failure (5) Pressure syn ne causing hoarseness of voice due to laryngeal paraly is ing pressure by the dilated left auricle on the left re ent laryngeal nerve (6) Strain of pregnancy and child n in women make the condition worse and failure is mon Once failure symptoms develop in women further gnancy makes the outlook worse and the question of tying tubes to prevent further conception may have to be gone seriously

**Prognosis** —As already suggested mitral stenosis causes an ediment to the cardiac circulation generally with involve t of myocardium hence naturally the patient s activity and ation of life are curtailed It is more serious than pure al regurgitation Complications specially like cerebral or nonary embolism may cause sudden death

**Treatment** —By itself an uncomplicated quiescent case out any evidence of active rheumatic fever need only a uous and restricted life

When symptoms develop the treatment should be (1) rest make the patient understand that he should live within limits of the capacity of his myocardium Failure symptoms ild be treated as detailed under heart failure Other hods of treatment depend upon the actual condition and ild be on the lines of either rheumatic endocarditis or rding to failure

## MITRAL INCOMPETENCE

**Synonym** —Mitral regurgitation

**Definition** —Reflux or regurgitation of blood from the left tricle to the left auricle during the systole of the ventricles

**Etiology** —This may be due to dilatation or thickening of valve ring (1) Dilatation may be due to **acute febrile** ases anaemia with altered character of the blood and lo s he tone of the vavular ring and weakness of the myocardium Some cases with hypertension or aortic disease due to en gement of the left ventricle cause a **relative incompetence** of mitral valve (3) As already said proper organic cases due stly to chronic rheumatic carditis with adherent cusps etc also may be due to primary degenerative changes In late ges of mitral stenosis due to widening of mitral ring usually tive again

**Pathology** —In rheumatic cases changes in the orifice of valve buttonhole or funnelshaped cause also some stenosi most cases with hypertrophy of the left auricle and finall

mitral stenosis generally show prominence of the pulmo artery region due to right ventricular hypertrophy left auri appendix and conus-arteriosus The right auricle may like a globular bulging margin The **lateral aspects** show posterior cardiac space or the retrocardiac space to be narr down and the oesophagus pressed upon by the dilated auricle specially visible with a barium meal in the oesophag

**Diagnosis,** may be difficult specially in early develo cases But where available a rheumatic history with a fe some suggestive subjective complaints with the typical p presystolic purring thrill as found by timing with the apex b and a presystolic murmur limited to the apex and bell of the stethoscope and an accentuated pulmonary sec sound and a skiagram and an electrocardiogram may helpful

**Differential diagnosis—Austinflint** murmur of aortic competence is found by the Corrigans or collapsing pulse w wide pulse pressure the apex more down specially with hy trophy and out notably in associated dilatation booming sustained first sound at the apex the murmur is soft and bl ing and the thrill not purring the diastolic murmur m prominent at the aortic area with a diastolic conduction do the sides or along the sternum usually clear up the difficu **Adherent pericardium** specially in children may occasiona give rise to a rumbling presystolic murmur due to dilatation the ring of the valve and is often associated with a systolic api murmur also Here again the bruit or murmur is not vibrat and rough like mitral stenotic murmur nor does it prece exactly the first sound neither other evidences of mitral steno are found

**Course**—Mitral stenosis is more or less a permanent impe ment to the circulation and has a prolonged course specially uncomplicated cases unless auricular fibrillation or heart failu cuts the course short

**Complications, may be numerous and are important** ( Recurrence of the rheumatic endocarditis worsening the stru tural and functional activity Endocarditis lenta may be graf ed on it (2) Embolic phenomena though usually not fro valvular or endocardial vegetations but from clots of blood (a) left auricle may cause emboli in brain spleen kidney et within (b) right auricle thrombi may cause embolism in th pulmonary circulation with some shock dyspnoea pain fric tion rub haemoptysis or even sudden death etc (3) Chroni hypertension in the pulmonary circulation causing brown indura tion of lungs and arteriosclerosis of the vessels haemoptysi etc (4) Ectopic beats or extrasystoles auricular fibrillatio with failure symptoms or failure independent of auricula

**(1) Distinction between haemic and organic murmurs of the heart —**

| | *Haemic* | *Organic* |
|---|---|---|
| 1 The site of maximum intensity | Mostly pulmonary may be also apical | Any where but organic pulmonary murmurs are usually congenital |
| 2. Position in cardiac cycle | Invariably systolic | May be systolic or diastolic all diastolic murmurs are organic |
| Character | Usually soft and blowing occasionally harsh | Soft or harsh |
| Conduction | Not conducted and may be doubtful | Except in mitral stenosis almost all are conducted |
| 5 Physical exercise and change of posture | Usually make them disappear or fainter | Not influenced |
| 6 Oertel's cardiac test | Make them fainter or disappear | May make them more distinct |
| 7 *Treatment* with anti anaemics etc | Make them disappear gradually with improvement | Not influenced |
| 8 Autopsy result | No structural lesion usually detectable | Structural lesions present |

**Febrile murmurs —**

(2) In some cases of acute fever there may be a soft apical murmur due to temporary dilatation of the mitral ring

(3) So called the **physiological murmur** In some apparently normal individuals there may be noted a systolic murmur at the apex of the heart and that without much significance But every such case should be fully investigated with a view that they may not be normal

(4) Relative dilatation of the ring or the mitral valve in dilatation of the heart may give rise to a murmur

**Exocardial murmurs,** or murmurs caused by factors outside the heart (A) Pleuro pericardial murmur is usually late systolic and is affected by respiratory excursions Withholding

the right ventricle and lastly the right auricle may be later with stasis and *symptoms of failure*

**Clinical manifestations Subjective**—The patient may g a previous rheumatic history and usually do not complain anything else unless the compensation of the heart suff When at early onset of cardiac decompensation (failure) notices undue dyspnoea on exertion and others to be discri later on

**On examination** in a fully compensated case of mit incompetence except findings in the heart nothing may encountered

**Heart Inspection**—The apex may be normal but gener ly is outside the normal limits On palpation the apex forcible and a systolic apical thrill may be palpable **Percussi** *may show a little downward and may be outward enlargeme* of the heart with slight left ventricular hypertrophy **Auscult tion** may reveal both sounds at the apex and the first sound usually followed **by a systolic murmur soft or harsh often co ducted outwards to the axilla and in some cases heard ov the capular angle** or rarely even on the spine The sound murmur is maximum at the apex gradually fading away one hears outwards There is usually an accentuated pulmo ary second sound

With **failure of compensation** there appears symptoms decompensation like dyspnoea palpitation may be cough an cyanosis The apex is outer than normal The pulse may b quick or irregular with extra systoles or auricular fibrillatio gradually there develops prominence of the neck veins oedem legs enlarged tender liver crepitations at the bases of th lungs and others Due to dilatation of the right ventricle th **tricuspid valves may become incompetent giving rise to systolic regurgitant murmur over the tricuspid area Now the liver is not only enlarged and tender but also may be pulsat ing specially due to tricuspid regurgitation and is generall associated with ascites and other failure symptoms** The urinar output is diminished and urine may be loaded with urate albumin and others Some change in the myocardium due to chronic congestion usually resulting in chronic fibrosis is not uncommon in both the mitral diseases A radiogram may be helpful notably for the size etc of the heart

**Diagnosis**—A probable rheumatic history with an apical *systolic murmur* conducted outwards and not influenced by change of posture or physical exercise and with cardiac change should help in the proper diagnosis

**(1) Distinction between haemic and organic murmurs of the heart —**

| | *Haemic* | *Organic* |
|---|---|---|
| 1 The [illegible]ite of maximum intensity | Mostly pulmonary may be also apical | Any where but organic pulmonary murmurs [illegible] usually congenital |
| 2. Position in cardiac cycle | Invariably systolic | May be systolic [illegible] diastolic all diastolic murmurs are organic |
| Character | Usually soft and blowing occasionally harsh | Soft or harsh |
| Conduction | Never conducted and [illegible] doubtful | Except mitral stenosis almost all conducted |
| 5 Physical exercise and change of posture | Usually make them disappear or fainter | Not influenced |
| 6 Oculo-cardiac test | Makes them fainter or disappear | May make them more distinct |
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**Exocardial murmurs** or murmurs caused by factors outside the heart (A) Pleuro pericardial murmur is usually late systolic and is affected by respiratory excursions Withholding

or breath silencing or altering the murmur materially synchronises with breathing (B) Pericardial murmurs are usually of to and fro or rub or diphasic in nature and is associated with pain and other findings characteristic of pericarditis described already

**Prognosis,** depends on the cause nature degree and associated conditions of the incompetence coupled with the state of the myocardium coronary and systemic vessels kidneys and others Generally when coupled with stenosis the prognosis is worse than simple incompetence In a simple case with subsidence of recurrent rheumatic damage having a more or less competent myocardium as judged by good tolerance to effort and the heart not enlarged is generally favourable with almost a normal span of expectancy of life provided the patient is made to learn not to ever exert himself and thus live within the reserve of the myocardium But a patient showing poor response to effort or with failure of compensation is naturally a risk even after proper treatment By itself it is one of the if the not the least dangerous of valvular defects

**Treatment** —No interference is indicated in uncomplicated cases except that he should be made to live within the limits of reserve power of his myocardium With the onset of failure symptoms proper treatment need be instituted

## DISEASES OF AORTIC VALVE
## AORTIC INCOMPETENCE

**Synonym** —Aortic regurgitation

**Definition** —Regurgitation of blood through the aortic valve

**Etiology** —(1) Syphilitic meso aortitis due to destruction of the middle coat of the aorta the ring dilates and in spite of the valves not being much affected or not affected at all there is dilatation only with incompetence (relative) found as a rule in a sex matured adult Other valves usually are unaffected thus distinguishing from rheumatic heart disease where the mitral valve is affected almost as a rule initially subsequently the aortic (2) Rheumatic The subject is generally a boy or young adult usually with mitral valve involvement and may have history of repeated rheumatic attacks with endocarditis In these cases it is actually a valvulitis of the aortic valves (3) In bacterial endocarditis such as lenta or in acute bacterial or ulcerative endocarditis (4) Nodular sclerosis of old age (5) Traumatic is rather rare (6) Congenital cause in which two valves may be fused hence closure is not very adequate

**Pathology** —The mechanism of syphilitic diseases has

and contraction of the cusps and may be associated with stenosis but seldom is the damage so extreme in degree as in the syphilitic variety The details of the pathology of syphilitic aortitis has been described under disease of coronary vessel already

As the left ventricle has an additional load of the blood reflux per each beat of the heart it has such a great burden that it becomes enormous in size with hypertrophy to dilate later on and just is the reverse of uncomplicated mitral stenosis and such enormous heart is called cor bovinum or bovine heart or the ox heart The state of aortic valve will depend on the cause being sclerosed and puckered in endocarditic type and not much affected in syphilitic variety

But one of the important effects of aortic incompetence is on the deficient filling up of the coronary vessels because, when the sinuses of Valsalva are filled up at diastole the coronaries get their blood supply for the nourishment of the myocardium This being improper or deficient the coronaries cannot get filled up during diastole and improper and often poor nourishment of the hypertrophied heart muscle may cause and actually causes *pain on exertion and other efforts thus making a greater demand* on the myocardium which cries out in ischaemic agony or the ischaemic cry of the myocardium The myocardial reserve is much drawn upon for this hypertrophy

**Clinical manifestations**—The patient usually is an adult in the syphilitic variety may or may not give a history of syphilis and in the younger subjects of rheumatic variety with associated mitral lesion may complain symptoms of either inadequate cerebral circulation due to reflux of blood or symptoms like giddiness or fainting attacks or night starts late at night with slower pulse rate thus producing inadequate cerebral circulation inability to concentrate the mind associated with or not headache palpitation dyspnoea etc Due to myocardial ischaemia of insufficient coronary supply precordial pain or distress may be one of the first complaints The aorta may appear tortuous on skiagram and a more or less constant substernal pain probably due to inflammation of tissues at the root of the aorta may have radiation to the left arm etc Later aortic aneurysm may follow

***Physical Examinations***—Due to insufficient supply of blood the patient looks pale though some think the pallor to be due to endocarditis There may be an anxious look and **the throbbing of the vessels at the neck** and of all the peripheral vessels may be very obvious The pulse is of a typical collapsing **(Corrigans) or water hammer type** and is best felt by grasping the pulse with all the phalanges at their junction with the palm first the wrist resting at the level of the heart then raising it

suddenly high up gives the sensation of a sudden tap with the characteristic collapsing feel at the diastole

**The heart** **Inspection** —The cardiac apical impulse is *generally on the sixth or seventh left interspace with a much* **wider area** than normal and is usually **more downwards than outwards** and **more heaving and sustained than normal** **Palpation** corroborates the findings of inspection notably th heaving sustained character of the apical impulse There is usually felt a diastolic thrill at the base of the heart better felt during expiration Percussion reveals the heart to be hype trophied as demonstrated by dullness extending more downwards and only slightly outwards Skiagram shows the enormous size of the heart and may be the dilated aorta or the arch

**Auscultation** —Both sounds are audible at the apex but *involvement of the mitral valve in rheumatic carditis may give* corresponding symptoms and signs There may be a rumbling diastolic murmur audible at the apex due to the regurgitant column of the blood falling down against the fibrosed mitral cusps called **Austin Flint murmur** In the aortic or pulmonary area more commonly in the former a diastolic murmur replac ing or making the second aortic sound less distinct may **best be heard either over the aortic or the pulmonary areas** The murmur is usually soft but may rarely be rough and is conduc ted down by the side of the sternum more commonly by th right than the left side When most audible over the pulmonary area according to some it is due to involvement f the left posterior cusp of the aortic valve The first sound over the aortic area may be normal or may be accompanied by a systolic murmur conducted up the vessels of the neck It may *be caused either by roughening of the aortic valves* speciall when a clear second sound is generally found or due to som stenosis when the second sound is likely not to be so clear or is associated with some degree of incompetence

The rhythm of the heart is *usually regular* and *the rate* variable The arteries may be thickened **Blood pressure** The systolic is high and the diastolic pressure very low having the characteristic of the disease namely a wide pulse pressure In one case is was *160/50* mm of mercury *The blood pressure in the* legs is generally higher than in the arms probably a compensa tory mechanism to maintain circulation specially in the brain On auscultation over the femoral arteries a diastolic thud or murmur may be heard in many cases called *Durozeiz murmur*

Capillary pulsation may be seen in the retinal vessels by the ophthalmoscope or on the nail bed by compressing the bed of the nail to make the area bloodless then as the capillaries *get filled up at that margin one finds dancing of the capillaries* so also may be seen over the forehead by drawing a white line

lso by pressing a glass slide on the inner side of the lip, these areas one can see the pulsating capillaries on the eing normal redness approaching the white blanched areas.

ourse.—This may be prolonged the patient being onally able to play games specially in early life and that y in the rheumatic variety

omplications.—Failure to maintain the cerebral circulation oly causes the giddiness or fainting attacks or night starts rence of endocarditis may mean worsening of the heart ion often associated with fever and occasionally embolism sion of the atheromatous changes and the circulatory in acy of the coronaries cause the pain during efforts and also cause anginal syndrome Heart failure sudden pe or death may follow

iagonsis may be difficult at the earlier stages The room l be free from noise or sound and the patient need be ned in both sitting and lying postures and again with full ation and also at full expiration On aortic and pulmonary and also conduction should be looked for by the right r middle of sternum

n a well developed case the condition can be diagnosed ) the typical collapsing pulse capillary pulsation enlarged diastolic murmur at the base of the heart conducted down ernum and wide pulse pressure are important Durozeiz ur is said to be pathognomonic A skiagram may be ary to distinguish other conditions like aortic aneurism etc

Differential Diagnosis.—When the murmur is best heard the pulmonary area one may suspect pulmonary petence but it starts usually in early life the pulse is not sing in character nor is there capillary pulsation present ventricular hypertrophy and not the left ventricular and onduction of the murmur is seldom down towards the and will never be audible over the carotids On the ary dyspnoea cyanosis and clubbing of the fingers are suggestive of pulmonary incompetence than aortic

Mitral stenosis.—The small volume and sustained pulse and f the collapsing type of aortic disease pulse is there typical purring presystolic thrill and the presystolic iur near about the apex accentuated pulmonary second l etc will help

Prognosis, depends on various factors The type of the se is important if progressive it is serious The degree sion and the condition of the myocardium aorta coronarie or without angina or syncope also determine the prognosi ogically in traumatic cases rapid or sudden death is the rule ie serious forms of endocarditis like sub-acute or acute nal endocarditis death was almost sure in few weeks in

the acute variety and in about two years in the acute type before the advent of penicillin Cases caused rheumatic variety with subsidence of recurrence is probably best prognostically though there is the risk of sub-acute acute bacterial endocarditis supervening In the syphilitic degenerative varieties both with tendency to be progressive generally grave and though may not be so severe as in recurrent rheumatic variety The wider the pulse pressure greater is the leak with graver prognosis Angina, syncope serious Myocardial failure is grave Sudden death is rare This form of defect is one of the if not the m serious of the valvular diseases

**Treatment** will depend according to the cause

## AORTIC STENOSIS

**Definition** —Aortic stenosis is narrowing of the aortic valve this may be relative or absolute It is rather uncommon the pure form

**Etiology,** may be due to rheumatic carditis where there the rigid and adherent cusp unable to open fully hence a relative stenosis with some amount of incompetence is generally present In a person near about or over 50 years the cause calcified nodular type of Monckeberg s athero-sclerosis whe the calcified cusps of the valves may be seen in a radiogram rarely it may be congenital or syphilitic

**Pathology** —The cusps of the valves are thickened adherent *and shrunken They lose their normal elasticity and mobilit* and hence may cause narrowing of the lumen Though th valves may appear also incompetent there may not be detected any regurgitant murmur during life In the degenerative variety marked thickening and calcification is found usually associated with pronounced concentric *hypertrophy of the left ventricle* which may dilate later on Relative stenosis is noted where though the aortic orifice is normal yet the aorta above the ring is found dilated

**Clinical manifestations** —The patient is a male may be past middle life in the degenerative variety younger in the rheumatic form may *complain of precordial pain or angina* or distress on exertion syncopal attacks due to exaggeration of the carotid sinus reflex Occasionally thrombosis of retinal vessels may disturb vision

On examination the patient looks healthy The pulse is slow small but of sustained type the artery remaining full in between the two beats The pulse tracing is characteristically anacrotic

sixth space external to the mid-clavicular line and extends over a wide area

**Palpation** —A rough systolic thrill is felt over the aortic area and the apex beat is verified

**Percussion** —The cardiac area is increased downwards and to the left A skiagram also helps

**Auscultation**, over the aortic area a rough rasping systolic murmur is audible conducted up to the neck vessels on the right side and may be also down the sternum when an absence of weak aortic second sound means some reflux also When this regurgitation is marked with stenosis the murmur may be heard at the back also In the mitral area the first sound may be replaced or be accompanied by a systolic murmur The pulmonary second sound may be weak if tricuspid regurgitation is also present the second sound is faint in almost all the areas of the heart The rate of heart beat may be slow and 50 to 60 per minute is usual and the rhythm regular

**The arteries** —The radial and brachial arteries are often found to be thickened The pulse tracing shows typical anacrotic type the dicrotic wave being absent or poorly developed

**Blood pressure** —The systolic pressure is not raised but the diastolic may be high

**Course**, depends on the cause which is usually slowly progressive

**Complications** likely are myocardial degeneration thrombosis of retinal vessels cerebral haemorrhage and cerebral thrombosis

**Diagnosis** —Pure aortic stenosis is rather a rare disease when only stenosis is suspected hence it should not be diagnosed only on a systolic aortic murmur which only indicates roughening of one of the cusps of the valve or atheroma of the aorta or aneurism or rarely intense anaemia etc

The diagnostic features are systolic thrill and murmur conducted up the neck vessels with hypertrophy of the heart and a small anacrotic pulse The second sound at the aortic area may not be clear or there may be a diastolic murmur indicating incompetence

***Prognosis*** —*In the degenerative* cases death usually ensues within a few years In the inflammatory group the outlook appears better

**Treatment** will depend on the cause and other associated factors

## TRICUSPID REGURGITATION OR INCOMPETENCE

**Definition** —Reflux of blood *from the right* ventricle to the auricle

**Etiology**—Generally tricuspid regurgitation is relative ar is due to dilatation of the right ventricle and secondary valvular lesions in the left side of the heart The common conditions in which it occurs are chronic bronchitis and em physema (cor pulmonale) pulmonary fibrosis etc Rarel endocarditis and congenital conditions may cause it

**Clinical manifestations**—The onset is somewhat sudden wit symptoms of right heart failure

**On examination** some cyanosis is almost invariable the nec veins are prominent may be with pulsating jugulars at eac ventricular systole and when emptied with the fingers these vein are found to fill up from below The liver is enlarged, tende and pulsate with each systole when tricuspid regurgitation i there

**Heart**—The apex is usually outside the mid-clavicular line but it is generally difficult to feel systolic thrill over the tricuspid area **Percussion** The heart is found enlarged to the right **Auscultation** reveals a short systolic murmur with its maximum intensity over the fourth right costal cartilage and lower right angle of the sternum It may sometimes be con ducted near the right nipple or heard at the back near about the angle of right scapula The pulmonary second sound may be feeble or not very marked Other murmurs may be heard over the aortic or mitral areas according to the presence or not of lesions of these valves Other signs and symptoms of conges tive failure like ascites rales at the bases of the lungs etc may be noted

**Course**—It depends on the cause of the relative incompe tence where the condition is remediable the patient may im prove

**Prognosis**, again depends on the cause and usually means grave notably with considerable degree of failure

**Treatment** according to cause but resolves mostly to that of heart failure as discussed already

## TRICUSPID STENOSIS

Brief narrowing of the tricuspid orifice is a rare lesion from either previous endocarditis or congenital heart disease This tricuspid narrowing may be associated with mitral stenosis

**Clinically** there is cyanosis dyspnoea on exertion he may be drowsy and cold The heart shows the apex may be out side A presystolic thrill may be palpated over the lower end of the sternum and the heart is found enlarged to the right on percussion or better by skiagraphy A mid diastolic murmur at the lower sternum conducted slightly upwards and to the right may be heard on auscultation The liver is usually

nlarged and pulsation of the organ is synchronous with auri ular systoles Oedema of the ankles and ascites may develop

**Diagnosis**—As it is a rare condition differentiation from nitral stenosis with which it is often associated need be one carefully With the start of auricular fibrillation the iastolic murmur usually disappears as no co-ordinated regular ontraction of the auricles is now possible

**Treatment** depends according to the cause

## PULMONARY REGURGITATION

This reflux of blood through the pulmonary valve is a rare alvular lesion It may occur as a complication of mitral tenosis with increased pulmonary pressure and dilatation of he pulmonary artery Rarely due to endocarditis grafted on ongenital pulmonary stenosis or as a congenital lesion com ined with it

**Clinically** this condition is characterised by a decreasing diminuendo) soft diastolic murmur *following* the second ulmonary sound in the left third interspace by the side of the ternum It is conducted down the left sternal border In dvanced cases of mitral stenosis pulmonary diastolic murmur nown as Graham Steel s murmur is thought to be due to pul nonary *reflux*

**Diagnosis etc**—As aortic incompetence murmur may be noted on the left side of the sternum it has got to be distinguish d by the collapsing pulse and wide pulse pressure hypertrophy of the heart etc all lacking in pulmonary reflux

## PULMONARY STENOSIS

Narrowing of the pulmonary valve is generally congenital but may be due to compression of the pulmonary artery by an neurism or a mediastinal tumour Very rarely it may be due o *infective endocarditis*

**N B—It should be clearly understood that** the murmurs of arious valvular defects by themselves are not of much signifi cance and we know that aortic valve disease and mitral stenosis have prognostic value and pure mitral regurgitation is of little significance but such hearts displaying diseases of the valves have usually been the seat of inflammatory processes or degenerative changes and the valvular diseases should be looked upon as inseparable parts of such disabling effects specially on the myocardium and other structures Mitral stenosis one of the commonest of rheumatic heart lesions not only leads to damages of all the layers of the heart but also the tendency towards recurrences piling damage upon damage cause considerable disability of all the components of the heart hence its serious

**Etiology**—Generally tricuspid regurgitation is relative and is *due to dilatation of the right ventricle* and *secondary to* valvular lesions in the left side of the heart The commoner *conditions in which it occurs* are chronic bronchitis and emphysema (cor pulmonale) pulmonary fibrosis etc Rarely endocarditis and congenital conditions may cause it

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These defects in short are

(i) either the inter auricular or the inter ventricular septum may be absent giving rise to *trilocular heart or cor triloculare*

(ii) Both inter auricular and inter-ventricular septa may be absent causing **bilocular heart or cor biloculare**

(iii) There may be a **patent foramen ovale or imperfect in ter auricular septum**

(iv) *The inter ventricular septum may be incomplete* specially at the upper end at the membraneous part of the septum

(v) The **ductus arteriosus may remain patent** due to its function not ceasing as it should normally have done soon after birth

(3) **Defects in the main vessels** (i) **Pulmonary stenosis** (ii) **Aortic stenosis and coarctation of the aorta**

(4) **Valvular defects** (i) *Pulmonary stenosis* is *one of the* commonest defects whereas pulmonary regurgitation is rare (ii) **Aortic valves may** show only two cusps with incompetence or there may be supernumerary cusps. (iii) **Tricuspid valve** may show congenital stenosis or regurgitation (iv) Rarely the *mitral valve may be stenosed*

(5) **Defects of conducting system** —Congenital heart block may be due to the lack of development of the upper part of the inter ventricular septum the auriculo ventricular bundle ending in a band of fibrous tissue

(6) **Combined lesions** —So called **Fallots tetralogy**

**Clinical Manifestations**

In a typical case due to deficient areation the baby is cyanos*ed and bule constituting morbus caeruleus or blue disease* and a murmur audible all over the precordium These defects may persist in late life also

On examination the child is found neither properly developed nor fully grown may be stunted and often mentally backward There may be marked clubbing of the fingers Due to improper oxygenation and excess of red blood cells of about seven to twelve million per cmm the haemoglobin may be as high as 140 *percent It may be difficult sometimes impossible* to diagnose the exact nature of the defect often there being combinations of abnormalities

**In patent foramen ovale** of some size the right side of the heart both auricle and ventricle enlarge the arc of the pul monary vessel is prominent There is a **systolic murmur often rough in the midsternal region** a thrill may also be felt

**Patent inter ventricular septum** —There is a murmur often extending from systole to diastole *the intensity is slight* in case of big opening but rough and rasping with a small apperture best heard in the third or fourth interspace or over the sternum

ness The aortic valves also sooner or later are involved in it with the resultant burden and impediment in the course of th circulation and the strain on the myocardial reserve

In syphilis or atheroma also the significance lies in the associated myocardial and other damages inseparable from valvular defects The details of the course of the underlying pathological processes as shown by a careful history and their effects on the reserve of the heart and the nature type duration of the mischief and the impediment are of greatest significance and should never be lost sight of

# CONGENITAL ABNORMALITIES OF THE HEART

**Etiology**—Though congenital heart conditions usually result from a developmental defect yet they may also be occasionally the result of foetal endocarditis The right side of the heart is more commonly affected possibly due to the higher prevailing pressure on the right side of the heart during foetal life It is commoner in boys and the first born child being the common subject German measles in the mother in the first few months of pregnancy may be a potent cause

**Pathology**—Congenital abnormalities may be found under the following conditions (1) **Abnormalities of position**—Absence of heart is not compatible with life **Abnormal positions** The heart when situated in the neck or in the abdomen the condition is called ectopia cordis (abnormally placed heart) The heart may be situated on the right instead of the normal position on the left side and is called **dextrocardia** means right sided heart

The septum dividing the aorta and the pulmonary artery may be defective but when formed normally a twisting takes place so that the pulmonary artery moves forward and to the right and the aorta backwards and to the left when this twisting fails to occur the aorta will arise from the right ventricle and pulmonary artery from the left this is known as **transposition of the great vessels** Other viscera may be normal or transposed also

(2) **Defects in the septum and foetal passages**—The key to most of the defects lies in the variations in the formation of the septum which divides the heart into a right and a left side The primitive heart consists of three chambers the auricle ventricle and the aortic bulb Separate septa are formed which divide these chambers longitudinally into right and left heart and subsequently get fused If anything goes wrong with this fusion congenital defects will result

These defects in short are

(i) either the inter auricular or the inter ventricular septum › be absent giving rise to trilocular heart or cor triloculare

(ii) Both inter auricular and inter ventricular septa may be ent causing **bilocular heart or cor biloculare**

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often accompanied with a strong thrill It is usually heard all over the precordium back of the chest neck etc Pulmonary second sound is not altered



**Congenital heart disease, with cyanosis note *the clubbing of the fingers, and stunted* growth**

## CONGENITAL PULMONARY STENOSIS

Congenital narrowing of the pulmonary valve is the most important of the congenital abnormalities of the heart.

**Etiology and Pathology**—The cusps of the pulmonary valves are often fused to form a diaphragm in the centre of which there is a circular opening The valve may be sclero e l or normal the cusps may be two or four instead of normal three Rarely the stenosis may either be proximal or distal to *the valve The wall of the right ventricle shows work hype*trophy It may be associated with patent foramen ovale defective inter ventricular septum and patent ductus arteriosu

**Clinical Manifestations**—The patient often cyanosed may complain of dyspnoea cough haemoptosis giddiness and headache

**On examination** there is cyanosis and clubbing of fingers In the **heart** on **palpation** there is a systolic thrill felt on th second or third left interspaces by the edge of the sternum

Dullness is increased to the right (right heart hypertrophy) On auscultation a harsh systolic murmur heard over the pulmonary base the second sound in this area being weak or absent

**Fallot's tetralogy** comprising of (1) Pulmonary stenosis (2) displacement of aorta to the right (3) enlargement of the right ventricle and a (4) defective inter ventricular septum The usual cause of this anomaly is the deviation of the bulbar septum to the right so that an unduly small pulmonary artery is cut off from an abnormally large aorta In a small number of cases this may be due to foetal endocarditis

**Clinical Manifestations,** this may be the cause of cyanosis and clubbing of the fingers in adult life A systolic thrill and murmur are usually present in the second or third left interspace near the sternum The skiagram is typical demonstrating the tetralogy already defined but may be with a concavity where there should be the pulmonary artery

## PATENT DUCTUS ARTERIOSUS

The ductus arteriosus is the channel by which in intra uterine life the blood passes from the right heart to the aorta without passing through the lungs As aeration and activation of the lungs take place this gets closed from the eighth to the twentieth day after birth But if it remains patent it usually does show as a mechanism compensatory to other defects such as pulmonary stenosis and aortic stenosis the patent ductus allowing blood to pass from the aorta to the pulmonary artery in pulmonary stenosis and from pulmonary to the aorta in aortic stenosis There is often present a patent inter ventricular septum

**Clinical manifestations**—Frequently the condition is asymptomatic without clubbing or cyanosis **The heart** **Inspection** Pulsation may be seen in the second or third left interspace at the sternal border due to enlargement of the pulmonary artery **Palpation** There may be felt a *diastolic* shock and a systolic thrill at the site of pulsation **Percussion** *reveals an area of ribbon shaped dullness extending upwards* from the pulmonary area to the left clavicle in some **Auscultation** *A murmur called water wheel murmur may be heard* which is of a harsh or blowing character beginning just after the first sound fading away towards mid diastole and becomes loud again with each systole This is best heard at the left second or third space by the side of the sternum and may be conducted up towards the left clavicle and at the left inter scapular region at the back and is due to blood flowing from the aorta to the pulmonary artery Pulmonary second sound is accentuated The apical second sound may be reduplicated

ıgram often shows a dilated conus arteriosus and a pulsating tus arteriosus may be detected on screen examination bolus of a blood clot passing from the left auricle or from ral or aortic valve to the lung may occur

## PATENT INTER VENTRICULAR SEPTUM

On auscultation over the heart a loud or harsh murmu ting early in systole extends into the diastole It may be rd along the left border of the sternum or in the mid ternal or near the third left costal cartilage or lower down at th hoid process It is neither conducted to the neck nor to la The pulmonary second sound is audible

## COARCTATION OF THE AORTA

**Definition etc**—The word **coarctation means cum meaning** **ther and arctary denoting to make tight i e a straightening** **assing together or a condition of stricture or contraction of** **aorta** This condition of narrowing of the aorta in the region re it is joined by ductus arteriosus There are two type his condition (1) The **infantile type** showing constriction orta between the emergence of subclavian artery and the us arteriosus the latter remaining widely patent Other iac abnormalities are also commonly present in this form The nt may be asymptomatic but may complain of intermittent lication The infantile form is not compatible with inued life and is found either in still born children or young ıts The narrowing may be small enough to allow only obe in it

(2) The **adult type** with constriction at or distal to the a le obliterated ductus The following findings are generally in the adult type

**Heart** **Inspection**—The apex ı a little more out and ı than normal On **palpation** the apex beat is more forcible a systolic thrill may be felt on the second left inter pace at sternal border On percussion the right and left borders be outer than normal **Auscultation** both sound are ble at the apex and the base A systolic murmur heard ıe second left space is conducted towards apex **Blood** **ure** is raised in the arms and low in the legs The **systolic** ure in the brachial may be 140 to 160 mm of Hg in a boy fteen years and usually no pulsation can be felt in th rals **Enlarged and tortuous arteries may be seen or felt** **ıe chest,** neck arms specially in the interscapular region **Skiagram** may show notching of the ribs caused by the on of the enlarged intercostal arteries Though the ascend ıorta dilates the aortic knob is small

**Termination** —Death may follow from congestive failure ure of the aorta or heart, *cerebral haemorrhage and bacterial* ocarditis and others

**CLINICAL PATHOLOGY** —(1) **Cyanosis** is the most char ristic symptom of congenital heart disease It may develop r on but is usually present from the moment the baby is born suggesting congenital heart disease , is due to admixture of venous blood from the t side of the heart with the arterial blood on the side But when there is no communication between two sides as in uncomplicated pulmonary stenosis e is no cyanosis (2) **Polycythaemia** In course of time erally not before the fifth year the red blood cells increase number probably as a demand to counteract the deficient genation of the blood The same reason explains the ease in size (average of 8m or even bigger) of the red cells s increase in number of the red cells should have to be distin ished from the idiopathic polycythaemia of Vaquez disease Osler s disease which is due to overactivity of bone marrows l the cells are of normal size and also may be from the so ed enterogenous cyanosis due to sulphaemoglobinaemia or haemoglobinaemia produced by the action of hydrogen phide ab orbed from some intestinal disorder acting on the od

(3) **Dyspnoea** commonly due to deficient oxygenation is a common symptom (4) **Growth** The patient is usually all and puny because growth is arrested (5) **Clubbing of fingers** is due to di turbance of nutrition of both the minal phalanges and the nails the latter being curved and ckened The bone of the digits generally shows no change e question of murmurs in the heart and other findings have eady been dealt with

**Prognosis of congenital heart diseases** —(1) Life is not pos le with ectopia cordis (2) Congenital pulmonary nosis seldom allows the patient to reach adult and generally carries him away by intercurrent disease or lmonary tuberculosis and other troubles (3) Patent ductus eriosus may not affect life much adversely (4) Congenital art disease help in the easy grafting of infective endocarditis ich usually proves fatal (5) Sudden death may be due to ebral thrombosis embolism rupture of valves etc

**Treatment** is not of much u e Lately surgical methods being tried

# DISEASES OF THE BLOOD VESSELS

**Preliminary Remarks —Arteriosclerosis** means arterial ardening and different authors having used it in different sense here is considerable confusion It generally comprises of the ollowing conditions

(1) Diffuse hyperplastic sclerosis generally characterised y hyperplasia of the intima and hypertrophy of the media he details will follow in the succeeding pages

(2) Degeneration of the media of arteries known as Moncke erg s *medial sclerosis* in which deposits of calcium *salts* ure een more or less in symmetrical rings around arteries

(3) Degeneration of intima of blood vessels generally known s atheroma because of the tendency to calcification as athero clerosis The term denotes various forms and combinations of ie above changes In addition the changes caused by arterial iflammation chronic as in syphilis or in acute infections.

*A classification of the diseases of the arteries is given below*

(1) Inflammatory (a) Acute arteritis, (b) chronic arteritis c) thrombo-angitis obliterans or Buerger s disease (d) eriarteritis nodosa or polyarteritis nodosa
(2) *Diffuse hyperplastic sclerosis*
(3) Monckeberg s medial sclerosis
(4) Fatty change or degeneration of the media
(5) Atherosclerosis or atheroma
(6) Other changes (degenerations) similar to atheroma
(7) Infiltration of arterial walls

Some of the clinical manifestations due to the above will e dealt with separately The commoner ones being (a) the ndrome of intermittent claudication resulting from several of e pathological conditions of the arteries described already

(b) Aneurysms which may be (1) saccular most commonly used by syphilis (2) Aneurysmal dilatation commoner in old ge and is generally due to atherosclerosis or (3) other un mmon forms of aneurysms

## INFLAMMATORY CONDITIONS OF THE ARTERIES OR ARTERITIS

**General Remarks** —The arteries may be infected from (a) icro organisms settling on the surface of the intima or (b) by e lodgment of an infective embolus inside the blood vessels ie infection may be (c) through vasa vasorum when organisms

reach the media or adventitia or (d) direct spread from contiguous inflammatory tissues

## ACUTE ARTERITIS

**Etiology & Pathology**—Though not a common condition yet usually is met with as a complication of acute infectious diseases The intima of the aorta may be infected in cases of septicaemia and pyaemia and most commonly in septic endo carditis when the organism is generally the streptococcus There may be vegetations upon the intima and the inflammation rapidly affects the other coats of the artery Occasionally the aorta may be infected in pyaemia or generalised sepsis through minute emboli in the vasa vasorum or the ascending aorta may be infected by spread in the vessel wall from acute pericarditi *The aorta might rupture or an aneurysm rarely formed* Some times multiple arteritis is frequently seen as a sequel of typhoid fever and less commonly after small pox influenza pneumonia and scarlet fever rare in India In many cases the organisms have been successfully isolated from the wall of affected vessels

**Clinical Manifestations** depend upon the vessels affected When the femoral artery is involved there may be severe pain along the course of vessel may be with redness swelling of the parts affected The limb becomes cold and pale and then peculiarly livid Pulse may be obliterated below If the onset is severe and sudden gangrene may threaten or follow In other cases several arteries when infected at the same time there may be high fever with symptoms of acute infections In cases of cerebral thrombosis in a young or middle aged patient making good recovery and living a more or less normal span of life might have been due to this condition of acute arteritis with recovery

**Prognosis & Treatment**—If the artery involved is large efforts should be made to avoid infectious gangrene and in many cases the ultimate result is encouraging For establish ment of subsequent circulation and stoppage of spread of gangrene Depropanex (Sharp & Dohme) may be of use In acute arteritis rest and general and local measures may be of use This condition is sometimes serious and should be treated with corresponding care and attention to details If coccic infection is the cause penicillin by injection and sulphonamides orally for days may be of service notably in febrile cases

## CHRONIC ARTERITIS

**Etiology.**—The commonest cause is acquired syphilis occasionally due to the congenital form In pulmonary tuberculosis the small arteries of the lung and in meningitis the

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subsequent use of mapharside or arsenoxide etc. and other ;phenamine of neoarsphenamine should have to be considered th due care Penicillin used judiciously in combination with : above may also do much good

## THROMBANGITIS OBLITERANS

### (Buerger's Disease)

**Etiology etc**—Though known before yet it was in 1908 it Buerger first demonstrated in his report of five hundred es all young adult males except three women the exact ture of the disease The affection is commoner in the legs in on the arms though vessels of any part of the body may affected As the essential lesions are in the deep vessels eries and veins of the inferior extremities hence the difficulty observing the initial acute phases of the disease

*The causes are not well known though certain Hebrew races* : more commonly affected yet no race is immune It is un mmon in India and I have seen five cases in 25 years of actice It may be due to an infection probably associated th some chronic poisoning Certainly in almost all cases the bjects were heavy smokers and according to other workers out 78 per cent were allergic to tobacco proteins although insensitive to nicotine itself In healthy nonsmoker control ily 16 per cent and in healthy smokers 36 per cent were found *nsitive—to proteins of tobacco*

**Pathology**—The media and adventitia and perivascular sues are infiltrated by polymorphonuclear leukocytes There e arteritis and periarteritis a phlebitis and periphlebiti long with there occurs thrombosis in variable lengths of flamed segments causing complete occlusion of the vessel and ay sometime affect the whole length from the popliteal to the orsalis pedis artery The clot is first red and soft or it may iow local purulent foci of polymorphonuclears and in other aces *may show areas of endothelial thickening*

**In chronic cases** with amputated limbs the disease having ed out the inflammation might have disappeared but the teries veins and nerves are bound up in a sclerosed mass of rous tissue The clot generally also having organised itself to a fibrous structure

**Clinical pathology**—Initial symptoms complained may be *un of an inadequate nature in one foot* or cramp like pain in ie calf muscle after he has walked a short distance and is due insufficient blood supply to the muscles during *the state of* inctional activity There may not be any pulse felt in the g with other evidences of loss of vasomotor control in the nb due probably to the involvement of the vasomotor nerves

arteries of the brain show endarteritis Chronic or sub-acute infections may cause endarteritis obliterans and encephalitis and polioencephalomyelitis cause changes in the adventitia of small vessels

**Pathology** —Pathological details have been adequately described under aortic incompetence and coronary disease These changes may be (1) End arteritis the intima being affected (2) Mesoarteritis (3) Periarteritis with involvement of the external coat In many cases of arteritis of the smaller arteries all the coats may be involved There may be direct rupture as a result of destruction of the muscular and elastic coats The intima may be thickened by inflammatory infiltration and proliferation In the earlier stages there i only round cell infiltration to be added to these come later on the fibroblasts whereas in syphilis plasma cells and eosinophils are the common cells infiltrating the affected areas This results in narrowing of the lumen of vessels eventually terminating in oblitrative endarteritis When the lumen is completely occluded notably in the spinal cord or the brain softening of the nerve tissues and in other structures fibrosis of the areas of supply result

When the cerebral vessels are affected arterial thrombosis occurs and in cerebral thrombosis in comparatively young people should always arouse the **suspicion of a syphilitic basis** and a blood serum reaction for W R and of the cerebrospinal fluid and also a therapeutic test under anti syphilitic regime etc are indicated Hemiplegia aphasia hemianopia etc or iritis more commonly choroiditis with white patches surrounded by pigmented areas impart a characteristic picture to the fundus oculi In syphilitic meningitis initial papilloedema may lead to optic atrophy Aortic involvement may lead to anginal symptoms or to aortic incompetence or to aneurysm to be dealt with later on

**Course** —The tertiary stage of syphilis generally ranging from two to five years from the date of infection may show the cerebral manifestations whereas the mesoaortitis may not come till ten to twenty years or later after infection

**Prognosis,** is fair when diagrosed early and treated adequately but irrecoverably advanced changes are for obvious reasons serious But in these cases also before much advanced changes institution of proper treatment may limit the damage and make it nonprogressive thus adding a few more years if not decades of useful life to his span

**Treatment** —For details see the treatment of cardiovascular syphilis The main sheet anchors are intramuscular injections of bismuth coupled with oral use of big doses of potassium iodide both for prolonged periods The question

of subsequent use of mapharside or arsenoxide etc. and other arsphenamine of neoarsphenamine should have to be considered with due care Penicillin used judiciously in combination with the above may also do much good

## THROMBANGITIS OBLITERANS

### (Buerger's Disease)

**Etiology etc** —Though known before yet it was in 1908 that Buerger first demonstrated in his report of five hundred cases all young adult males except three women the exact nature of the disease The affection is commoner in the legs than on the arms though vessels of any part of the body may be affected As the essential lesions are in the deep vessels arteries and veins of the inferior extremities hence the difficulty in observing the initial acute phases of the disease

**The causes** are not well known though certain Hebrew races are more commonly affected yet no race is immune It is uncommon in India and I have seen five cases in 25 years of practice It may be due to an infection probably associated with some chronic poisoning Certainly in almost all cases the subjects were heavy smokers and according to other workers about 78 per cent were allergic to tobacco proteins although nonsensitive to nicotine itself In healthy non smoker control only 16 per cent and in healthy smokers 36 per cent were found sensitive—to proteins of tobacco

**Pathology** —The media and adventitia and perivascular tissues are infiltrated by polymorphonuclear leukocytes There are arteritis and periarteritis a phlebitis and periphlebitis Along with there occurs thrombosis in variable lengths of inflamed segments causing complete occlusion of the vessel and may sometime affect the whole length from the popliteal to the dorsalis pedis artery The clot is first red and soft or it may show local purulent foci of polymorphonuclears and in other places may show areas of endothelial thickening

**In chronic cases** with amputated limbs the disease having died out *the inflammation might have disappeared but the* arteries veins and nerves are bound up in a sclerosed mass of fibrous tissue *The clot generally also having organised itself* into a fibrous structure

**Clinical pathology** —Initial symptoms complained may be pain of an inadequate nature in one foot or cramp like pain in the calf muscle after he has walked a short distance and is due to insufficient blood supply to the muscles *during the state of* functional activity There may not be any pulse felt in the leg with other evidences of loss of vasomotor control in the limb due probably to the involvement of the vasomotor nerves

in the inflammatory and sclerotic process as they run in the periadventitial tissue of blood vessels

*After a lapse of months or years trophic changes resulting* in discoloured areas eventually going on to gangrene may necessitate amputation The sympathectomy generally done for treatment aims at the establishment of collateral circulation and relief of spasm of vessels The pain of this gangrene is very excruciating whereas the pain or cramp of early insufficient blood supply might amount to difficulty alone

**Diagnosis**—Raynaud s disease is commoner in females and the upper limb is more commonly affected skiagram may reveal atrophy of bones of the hands which is not found in thrombangitis

**Erythromelalgia**—The limbs are red and flushed but the arteries are pulsatile and no gangrene supervenes **In Moncke berg's** sclerosis the skiagram may reveal some calcification of arteries

**Prognosis,** varies some progress rapidly others do not go down hill for years others require quick amputation

**Treatment**—Iodides glyceryl trinitrate are used Dia thermy and gentle massage may help Ultra violet ray therapy may be tried Buerger s passive postural exercises to establish alternate hyperaemia and blanching or ischaemia have been *tried with some success This is accomplished practically by* making the limb to hang down or by causing congestion by tying a rubber band to the limb and then to raise it above the level of the body in a recumbent posture thus ensure blanching These are repeated several times Others have claimed good results by the maintenanc of high venous pressure and stimula tion of the heart Pain may be relieved by recumbent position and application of warmth or by local heat or by electric pads or electric bath etc Ulcers of gangrene may require surgical management A method of treatment by increasing the blood volume by injection intravenously of hypertonic saline has been *tried with some result*

## PERIARTERITIS NODOSA

**Synonym**—Polyarteritis nodosa

**Definition etc**—A condition commonly affecting the blood *vessels of young adult males be due to (1)* vascular hyper sensitivity because a number of cases have been found during serum sickness (Rich) (2) some suggest it to be of rheumatic origin (3) may be infective as well

**Pathology**—It is the medium sized arteries of the muscular type which are more commonly affected in contrast with those affected by syphilis and rheumatic fever *Common sites are*

the medium sized arteries of the intestine heart and kidneys The arteries may feel like peas in a pod and the affected areas may be eventually aneurysmal The adventitia and media are infiltrated with neutrophils, resulting in extensive necrosis of the middle coat whence may result several aneurysms The intimal lesion may lead to thrombosis which eventually canalise or the areas of supply may show infracts with ultimate scarring

Recent knowledge seem to favour the view that there are three stages of the disease

(1) *Acute stage, with symptoms of an acute inflammatory* type when diagnosis may be impossible because the vessels of any organ of the body may be affected giving rise to a variety of symptomatology corresponding to no system disease and thus suggest a diagnosis A moderate eosinophilia to the extent of 15 per cent occurs in about 20 per cent of the cases and may be as high as 80 per cent in some

(2) **The granulation tissue stage,** due to partial occlusion of the mesenteric vessels there may be considerable pain colic nausea vomiting the abdominal acuity or urgency of symptoms suggesting acute abdomen Similarly there may be acute symptoms pointing to the heart or kidney or rarely to the brain and the lung Pain in the muscles may cause a mistaken diagnosis Lesions in the nerves may give rise to neuritic pains etc In addition to the symptoms of vascular occlusions there may be suggestive manifestations of general toxaemia like fever prostration *sweating loss of weight simulating bacterial* infection

(3) **Some cases recover and may show nodules in the course of vessels** Subsequent renal or cardiac insufficiency following recovery from an acute febrile illness suggests the diagnosis of this disease Blood shows anaemia and moderate leukocytosis Culture of the blood is usually sterile

**Diagnosis and others**—This may be impossible due to the variety of manifestations to be only definitely ascertained on autopsy Rarely a palpable node on the subcutaneous tissues may suggest the diagnosis Any obscure illness involving the artery *should suggest this disease*

**Treatment** should be as in all acute illnesses The parts involved are to be raised and treatment in the lines of acute septic inflammations by sulphonamides and penicillin etc may do some good The rest is symptomatic

## DIFFUSE HYPERPLASTIC SCLEROSIS

This condition has already been described under hypertension caused by arteriolosclerosis giving rise to hyperpiesia or essential hypertension for details see their respective chapters

## MONCKEBERG'S MEDIAL SCLEROSIS

**Definition** —This is a form of arterial degeneration accompanied by deposit of calcium salt in the media of the medium sized arteries of the muscular type pecially those of the lower limbs and the parietes, and may be also seen in the uterus and ovary of old women

**Etiology and Pathology** —Various toxins may contribute notably diabetis mellitus and old age are probably common factors

The gross appearance shows deposition of calcareous rings encircling the vessels which may show some resemblance to trachea Sometime they fuse to form a hard tube or pipe

There is swelling fragmentation and degeneration of the mu cle cells with fatty changes mostly of the media Calcium gets deposited as fine granules which fuse to form large calcarious masses Though generally the size of the lumen is not reduced yet not infrequently atheromatous changes are superadded leading to narrowing and even to thrombosis eventually resulting in gangrene particularly of the inferior extremities

**Symptoms,** may be due to inadequate circulation such as coldness and oedema of the inferior extremities In senile and diabetic cases ultimately there may be gangrene of the lower limb A skiagram may show calcified arteries

**Prognosis,** depends on the amount extent etc of the calcification and the gangrene when developed

**Treatment** if suitable the lines of therapy applicable to Buerger s disease and other lines which failing later on amputation above the knee may help

## ATHEROMA OR ATHEROSCLEROSIS

**Definition** —Degeneration of intima where lipoid and other deposits take place to be eventually calcified The derivative meaning of atheroma is derived from the Greek word meaning gruel used first by Gallen to signify a swelling full of soft gruel like material

**Etiology** — The man is only as old as his arteries ha been very well spoken Though a condition common in elderly life yet in persons of certain families probably with poor type material used in the make up of arteries show atheroma at comparatively young age Hypertension overeating wear and tear of hard life appear to predispose and is commoner in males than in females Commonly seen in aorta and less commonly in the pulmonary arteries in cases of mitral stenosis or chronic bronchitis and enphysema with raised pulmonary pres ure Chronic poisoning in diabetes mell tus lead poio ning gout

the hypertension consequent on chronic kidney disease may assist and hasten the process

**Pathology**—Commoner in the large elastic arteries with muscular coat but most generally seen in the aorta coronary, cerebral radial retinal brachial temporal arteries The peripheral arteries may be normal whereas the coronaries and the cerebral vessels may be markedly affected In aorta the lesions generally appear in the posterior walls specially around the mouth of the intercostal vessels and is more marked in the descending than in the ascending and is more pronounced in the abdominal than in the thorasic portion of the aorta The affected areas show yellow linear streaks just raised above the general level of the surface representing areas of deposit of fatty material under the intima The plaques lose their yellow colour and look like paraffin drops. If cut into the material is found to be of soft yellow pultaceous material resembling gruel hence the greek name atheroma If the patch opens up inside the lumen an atheromatous ulcer may result Deposition of calcium in these areas may render them as brittle as shell of an egg and by their breaking down may lead to initiation of a dissecting aneurysm

**Microscopically** the material is mostly lipoid chiefly of cholesterol ester in the deepest part of the intima These deposits are partly in the intercellular ground substance partly in the branched connective tissue cells of the intima The fatty change gradually extends to the surface The sclerotic phenomena typical of atherosclerosis is evidenced by the thickening of the connective tissue overlying the fatty area

This is quite different from the intimal thickening of syphilitic arteritis In syphilis there is fibroblastic proliferation whereas in atheroma the thickened tissue undergoes a hyaline change and practically no cells could be seen as a matter of fact this new material does not look like connective tissue nor does it give a connective tissue reaction by staining methods

From the standpoint of the aorta there have been two main types of coronary involvement (1) The younger type from 22 to 45 years of age the dominant change being subendothelial fibrosis causing an eccentric thickening and narrowing of the lumen and as the nutrition of the new fibrous tissue is derived from the lumen it becomes inadequate as the thickening increases so that necrosis starts and eventually easy thrombosis may occur on such necrotic surfaces There is hardly any calcification in this early group and the dominant changes are fibrosis and thombosis found in many persons of sudden death before the age of 30 to 40 years (2) The second group generally in persons over 45 years of age there are collections

of lipoid cells in the intima with a tendency to formation of atheromatous ulcers or abscesses and the fibrotic reaction of the *young is absent and the calcification marked Thrombosis may occur but much less commonly in comparison with the younger* group

**Clinical manifestations Heart**—Besides the changes in the myocardium described under the above heads there may be fibrosis of the heart muscle with diminished reserve power etc already described under chronic myocarditis coronary thrombosis angina etc described in the preceding pages

**Vessels**—The changes in the walls of the arteries also affect *the tissues supplied by them The vessels become stiff and* sclerosed The Blood pressure may rise, the aorta may be elongated and tortuous Though there may be present atheromatous ulcers yet true aneurysm is rare

**Brain** may show softening hemiplegia may be from haemorrhage and sometime from thrombosis may not be uncommon The retinal arteries may look tortuous as seen by the ophthalmoscope

**Kidneys** may show scars and clinically blood in the urine *Spasms of the cerebral vessels may lead to temporary* loss of function of the brain with resultant manifestations which are usually temporary and passing

**Prognosis**—The course and prognosis are very uncertain Though generally circulation may be adequate through the diseased vessels yet thrombosis may occur suddenly with grave consequences notably when the vessels of the vital organs like *the heart or the brain are involved*

**Treatment,** is unsatisfactory but the diet should be spare but square with suitable vitamins and repletion avoided Regular physical exercise and moderation in eating and drinking seem to be useful Small doses of pot iodide may help by stimulating the thyroid gland and thus reducing hypercholesterolaemia and may also help in getting the degenerated tissues absorbed and thus assist in *flow of blood through the obstructed* areas

There may be fibrotic and hyaline degeneration which are allied to atheroma It is somewhat akin to essential hypertension and the ultimate result is the loss of elasticity etc

## AMYLOID DISEASE OF ARTERIES

Long continued suppuration long standing tuberculous syphilitic and ulcerative lesion of tissues or of bones etc cause deposition of amy*loid sub tance in extracellular tissues* just beneath the endothelium of capillaries of spleen (sago spleen) intestine etc The patient is pale and has alabaster facies and

may complain of severe chronic painless diarrhoea The urine is of low specific gravity but contains moderate amount of albumin The liver and spleen are palpable there may be ascites and oedema of the inferior extremities For the details myloid disease of he kidney and spleen should be consulted

## INTERMITTENT CLAUDICATION

It is a condition of severe pain experienced as a rule in the legs and thighs in elderly people with well marked calcification of the medial coat of arteries (Monckeberg s) of the lower limbs caused either by atheroma or by any of the changes described already which tend to narrow down the lumen of the arteries such as hyperplastic sclerosis or thrombangitis obliterans associated with hypertension over indulgence in tobacco gout diabetes syphilis etc The symptoms are due to the insufficiency of adequate supply of blood required during increased functional activity of the muscles notably in walking and may be one of the earliest indications of partial impairment of blood supply to the limb

***Symptoms etc*** *—The symptoms come quicker in fast than* in slow walking and usually ceases while at rest The pain may be accompanied by cramps in the calves and with numbness and tingling of the limb Sometime when associated with anginal symptoms these may disappear as the patient cannot walk fast enough to induce anginal pain or for fear of or due to actual intermittent claudication The arteries may be blocked and the pulse in the dorsalis pedis may be absent There may be symptoms of lack of circulation to the distal areas of the legs such as the feet toes etc X Ray examination of the legs may specially visualise the arteries and thus reveal variable calcification of the vessels In extreme cases dry gangrene may supervene

**Prognosis** *is generally bad and the symptoms may persist* for years before actual gangrene may set in

**Treatment** should consist in rest relaxation and slow walking because hurry generally precipitates attacks. Local application of diathermy injection of muscle extracts or *depropanex or priscol or padutin etc* have been tried with variable results Dry gangrene may require amputation or other suitable surgical intervention

## ANEURYSM

**Definition** —The word aneurysm as derived from Greek meaning to widen or dilate hence aneurysm is localized dilatation of an artery caused by changes in its walls

**Varieties** may be **true aneurysm** when one or more coats of the artery form the wall of the aneurysm They may be again sub divided into (i) **fusiform** aneurysm a dilatation of a segment of the vessel and is seen in the aorta and the big vessels (ii) **Saccular** aneurysm a more or less localized pouching of the vessel at a point may be in the course of big or small arteries and is the commonest type of aneurysm (iii) **Dissecting aneurysm,** though not exactly a true aneurysm as the vessel is not dilated consists of a new channel formed by the media of the artery through which the blood flows to a variable distance before regaining its normal path (iv) **Cirsoid aneurysm** consists of fusiform dilatation of a small artery and its branches common in the leg and in the scalp

(2) **Arteriovenous aneurysm,** is really a shunt between the artery and the vein without the interposition of the capillaries (i) When the blood passes directly and forcibly into the vein and the latter dilates and is caused arteriovenous varix or aneurysmal varix (ii) When the artery and the vein communicate through a sac it is called a varicose aneurysm

(3) **A false aneurysm** is a swelling containing blood communicating with an artery but the walls are formed by surrounding tissues and not by arterial coat so actually it is a haematoma communicating with an artery

Among these the fusiform saccular and dissecting aneurysms are more of medical and others of surgical importance Cirsoid or berry aneurysms of the brain are of clinical significance

**Etiology**—(I) Every aneurysm is caused by the weakening of the arterial coat specially of the media most commonly affected by (a) **syphilis** the commonest cause of this lesion and holds good with aorta and bigger vessels In the case of smaller vessels syphilis is seldom if ever the cause (b) **arteriosclerosis** with intimal thickening is the commonest cause of the aneurysm of the smaller vessels

(2) **Mycotic aneurysms** are generally multiple and occur in association with infective endocarditis septicaemia and septic emboli being carried by vasavasorum to the arterial wall where suppuration and thus weakening of the arterial coat leads to formation of aneurysm

**Periarteritis nodosa** may weaken the blood vessels from outside leading to multiple small aneurysms

(4) **Infection from** an abscess or tuberculoma may be the starting point of an aneurysm (5) **Congenital weakness** of the media of the arteries at the base of the brain may be the cause of congenital aneurysm (6) Finally **fusiform** aneurysmal dilatation may be met with in **coarctation of the aorta**

## AORTIC ANEURYSM

**Etiology**—Syphilis is the commonest cause next come arteriosclerosis and others Aneurysms appear not as common in India as in England and other countries

**Predisposing causes** are age generally above fifty years sex—about ten time commoner in males occupation involving physical strain are commonly affected

**Pathology**—Syphilis causes mesoaortitis with cellular infiltration round *vasavasorum of the media which eventually form* more or less into gumma involving the muscular fibrous coats which on breakdown causes too much weakness of the arterial wall to tand the pressure exerted from inside causing dilatation and thus an aneurysm forms The sac of the aneurysm consists internally of layers of blood clot and outside this is to be found the remains of the media and outer coat and fibrous tissue and may also be formed by surrounding tis ue like sternum vertebra trachea which the aneurysm may be adherent to The inner layer may be calcified In the adjacent parts of the aorta there may be found scars of syphilitic aortitis About 75 per cent of the aneurysms are thorasic in site involving the arch of the aorta only 10 per cent are abdominal

## ANEURYSM OF THE THORASIC AORTA

Broadbent taught that aneurysm of the ascending aorta caused only physical signs—**hence called aneurysm of signs** whereas aneurysm of the **transverse or descending part of the arch gave rise to symptoms** hence called **aneurysm of symptoms** —mostly due to effects of pressure

## ANEURYSM OF THE SINUSES OF VALSALVA

The patient may be a comparatively young man of between 30 to 45 years of age and complain of headache fainting attacks precordial distress or pain resembling that of angina

On examination there may not be any signs of aneurysm detectable but only evidences of aortic incompetence with reflux In some cases due to the pressure of the aneurysm on the inferior venacava there may be oedema of the legs ascites with dilatation of the veins in the abdominal walls He may die suddenly from rupture into the pericardium—called death by rupture of a medicolegal aneurysm Slow rupture may cause gradual leaking of blood with symptoms and death may follow in a few days time.

## ANEURYSM OF THE ASCENDING AORTA

When an aneurysm occurs above the level of the valves of the aorta it presses upon the ribs and chest wall eventually

eroding the ribs There is dullness to the right of the sternum in the second and third intercostal spaces and when it becomes larger with local bulging and a tumour manifesting expansile pulsation is noted A systolic murmur is generally heard over this aneurysm the pain may be severe

**Aneurysm of the arch**—The affection of the arch of the aorta gives rise to numerous signs and symptoms which may be classified as follows —

(A) **Pressure on the trachea and lungs**—When the aneurysm is adherent to the trachea there might be partial constriction of the wind pipe and when the patient is examined with the head well thrown back and the observer s fingers press firmly on the cricoid cartilage if **tracheal tug** is present the cricoid will be felt to be drawn downwards with each beat of the heart Pressure on a main bronchus may cause collapse and easy infection and eventually abscess formation may follow to the parts rupture into the lung may sometime lead to haemoptysis An intrapleural rupture may also cause fatal results

(B) **Pressure on the nerves**—The left recurrent laryngeal nerve is most commonly involved and causes laryngeal irritation initially or paralysis of the left vocal cord irritation producing a harsh brassy cough and paralysis is indicated by the hoarseness of voice In some cases these may be the earliest signs detectable of an aneurysm Pressure on the sympathetic nerve at the root of the neck may lead to widening of the palpebral fissure dilatation of the pupils and exophthalmos during the phase of irritation to be followed by narrowing of the pupil and palpebral fissure and enophthalmos at the stage of paralysis of the *sympathetic fibres*

(C) **Pressure on veins**—When the superior venacava is pressed upon there is congestion of the head and face and some time of the arms may be with establishment of the colateral circulation through the epigastric and mammary veins—findings commoner in mediastinal tumours than in aneurysm

(D) **Oesophagus**—Symptoms of dysphagia resulting from actual pressure is uncommon but generally it is pushed to one side Rarely when the aneurysm ruptures into the oesophagus rapid death usually *follows*

(E) **Inequality of the pulse at the wrist** may be there according to the site of the aneurysm arising from the innominate or the left subclavian arteries or an aneurysm of the aorta involving the site of the origin of these vessels which is more common The pulses are only unequal in volume and the blood pressure recorded in the two sides of the arm may be different and they may not be synchronous as well

**Aneurysm of the descending thorasic aorta,** is comparatively rare and the symptoms are pain due to erosion of the spine causing irritation of the nerve roots The bony bodies of the vertebrae are more eroded out leaving the comparatively resilient and softer intervertebral discs not much eroded just the opposite are the findings in tuberculous disease of the spine where the discs are more affected than the vertebrae The pain is excrutiating and persistent and is felt generally around the chest or upper abdomen according to the course of the nerve thus pressed upon The physical signs may be indefinite but rarely a pulsating swelling may be felt over the back or a localised systolic murmur audible Compression of the lung or a bronchus will give rise to corresponding groups of signs and symptoms

**Aneurysm of the abdominal aorta**—The commonest sit of this condition is generally immediately below the diaphragm but fortunately is rarer than the thorasic aneurysms The diagnosis may be difficult but severe and persistent epigastric pain unaffected by diet and only relieved by large doses of morphine should arouse suspicion and a radiogram taken These are due more commonly to arteriosclerotic than to syphilitic changes.

**Diagnosis** **Inspection**—Any abnormal pulsation should be looked for in the thorax by suitable illumination and in good light Pulsation at the back of the chest is generally more common in the left of the spine Enlarged veins over the chest congestion of the face and the pupils and the palpebral fissure etc should carefully be noted The apex beat of the heart may be displaced

**Palpation,** may show some abnormal pulsation which is diffused initially to be heaving and expansile when the chest wall is eroded Occasionally a diastolic shock may be felt and also a systolic thrill **This diastolic shock may be due to** (1) sudden forcible clo ure of the aortic valves producing an effect inside the aneurysmal sac or (2) the contraction of the heart draws in the ribs during systole at the point where they are adherent to the aneurysm and the diastolic shock is produced by the elastic recoil of the ribs and costal cartilages

**Percussion**—In case of aneurysm of ascending aorta an area of dullness in the second right interspace may be made out Rarely aneurysm of the arch may press forward and to the left producing an area of dullness below the left clavicle Pressure upon the bronchus may produce variable signs and symptoms in the lungs in localised areas

**Auscultation**—A systolic murmur is not uncommon when both systolic and diastolic murmurs are heard aortic regurgitation is present probably in addition Accentuation of the aortic

second sound is generally a common auscultatory sign The question of inequality of the pulse has already been discussed

Radiological examination of the chest in antero posterior and oblique positions are essential A pulsating tumour is generally diagnostic The density of the shadow of the sac when show lamination through deposition of blood clot inside the aneurysm in layers is suggestive

The **differentiation between an intrathorasic aneurysm and a tumour may be difficult** Pulsation specially if expansile diastolic shock and presence of murmurs and accentuation of the aortic second sound are rarely heard in tumours hence go in favour of aneurysm Tracheal tugging favours the diagnosis of an aneurysm whereas progressive weakness wasting enlargement of the glands in the neck are all in favour of a tumour The person with aneurysm is generally between 45 to 60 years of age and is usually healthy whereas in malignancy the patient is generally pale and emaciated and not so flushed and florid as the patient with aneurysm is In aneurysm the pupils and pulse are commonly unequal while in a tumour oedema of the upper extremities and chest wall suggest mediastinal syndrome X Ray examination and W R of blood may also help The other conditions causing some but not true difficulty are aortic incompetence an empyema pointing towards the left side in the region of the heart and may be pulsating similarly pleural effusions may cause difficulty but these are usually settled by the X Ray examination

**Prognosis,** is serious in the majority complete cure is unlikely although pain and other symptoms may improve under treatment Rupture into the hollow organs may lead to sudden death Heart failure or respiratory complications may hasten the end Syphilitic cases when treated at the initial stage have a better outlook

**Treatment**—As most of the cases of aortic aneurysm are syphilitic in origin the details of treatment can be seen in that of aortic incompetence or under the treatment of vascular syphilis The sheet anchor consists of gradually increasing doses of potassium iodide with intramuscular injection of bismuth initially for a month or longer to be followed up by intravenous injections of arsenoxide or other suitable organic arsenicals

The patient should lead a quiet life and in cases of severe pain amyl nitrite or other nitrites may be tried

**Surgical treatment may be** considered under (1) ligature of the vessels arising from the arch of the aorta (2) the passing of suitable wire into the sac with or without galvanism (3) may be needling of the sac and (4) ligating the neck of the sac In some advanced cases the outlook under medical treatment is

more or less hopeless hence one is justified in inducing him to take risks under surgery

## PHLEBITIS

Phlebitis is inflammation of veins and may generally b of two types—(1) **Nonsuppurative or plastic** (2) **Suppurative**

The inflammation may be *periphlebitis* or *endophlebitis* i e inflammation of the outer or the inner coats of veins The periphlebitis as expected generally results from some outside sources or injury whereas the endophlebiti is usually caused by circulating bacteria As plastic endophlebitis is generally associated with a thrombus or clot inside the vein it may partly or completely obliterate the lumen and the whole mass may be transformed into a fibrous nodule when localised or into a cord when some length of the vein is affected The thrombus may however soften and thus be ultimately canalised with eventual consequent resumption of circulation There may be spontaneous clotting due to changes in the composition of blood with plastic phlebitis at the site of clot causing thrombophlebitis etc.

When the cerebral or coronary vessels are involved th conditions assume great clinical gravity and importance If the clot is infected pus may form in the area or a general sepsis of the whole system may supervene

## PLASTIC PHLEBITIS

**Etiology**—(I) It may be caused by (1) infections like typhoid fever pneumonia influenza etc (2) Trauma (II) Noninfective thrombophlebitis (III) in gouty joint this may follow (IV post operative (V) phlegmasia alba dolens or puerperal phlebitis often follows child birth or typhoid fever

**Clinically**—There is pain and tenderness along the course of the vein which may give a cord like feel and the limb is oedematous usually associated with fever and other constitutional disturbances There may be multiple and symmetrical thrombosis also

***Treatment***—Bed rest should be absolute The limb wrapped in cotton wool *elevated and kept warm* movement pressure massage etc are very risky hence should always be avoided because they may help in dislodgment of the thrombus o some distal vital organ or by further damage to the endothelium may lead to more trouble Bowels should be kept regular as constipation and stasis in the colon may impede the circulation of the iliac veins Gouty people in good health should have a restricted dietetic regime Eggs and milk due to their cholesterol and calcium content need be limited

Citrate and acid fruit juices may be of special use Provided there are suitable laboratory facilities the patient may be treated by heparin or dicoumerol after proper check by the estimation of coagulation time and prothrombin time etc of the patient s blood

## SUPPURATIVE PHLEBITIS

**Etiology —Suppurative phlebitis** usually results from pyogenic organisms infecting the walls of the veins The microbes may be present in (a) the circulation as in some cases of puerperal phlebitis (b) or may reach the site from contiguous areas of suppuration as in facial carbuncle or mastoid carbuncle or from area of portal circulation suppurative pyelophlebitis

**Pathology** —The course of the veins are infiltrated with leukocytes the clots formed in the vessel generally break eventually into pus which looks yellow and there may appear abscesses in the course of such veins

**Clinically** —There may be local oedema in the area of drainage of the vein coupled with smarting pain throbbing etc Not infrequently septic process may pass along the course of the vessel and constitutional symptoms like fever headache quick pulse dry tongue etc may be found In severe cases delirium repeated rigors progressive anaemia may be sweating which may be even drenching suggest pyaemia Localised abscesses in different parts of the body may reveal the exact nature of the underlying pathology

**Complications,** etc usually depend on the situation size nature and the area of supply of the vein Emboli may not be uncommon either

**Diagnosis,** is easy when the vein is superficial but when deep seated and small it may be very difficult and sometimes even impossible

**Treatment** —Aseptic surgery by preventing occurrence of suppuration has gained a step in reducing its incidence As soon as diagnosed ligature of the vein and removal of the septic material by opening up the lumen are of importance In very severe cases turning serious the question of amputation may have got to be discussed seriously

## THROMBOSIS AND EMBOLISM

Thrombosis is intravascular clotting of blood during life and includes clotting inside the heart arteries or veins The commoner causes are (1) altered or increased tendency to coagulation of blood as in weak anaemic subjects or in certain infections and after surgical operations (2) Slowing of the blood flow inside vessels or heart as in the appendages of the

dilated auricles of the heart specially in the left auricle mitral stenosis or in failing heart in the right auricle (3) inflammation or roughening or sclerosis of the internal lin as in atheroma or narrowing due to syphilitic or other chang

(A) **Intracardiac thrombi** are common in the left aur as already mentioned in mitral stenosis part of which may dislodged and be carried to the left ventricle to form emboli the system specially of the cerebral vessels of the left side sple and kidneys leading to infarction This danger is maximu during the first stage of formation of thrombus because it c easily get dislodged whereas an old thrombus may be par organised and thus be more adherent to the mural endocardiu hence does not tearout easily During coronary thrombo there may be clot formed in the inner side of the endocardiu on the area of infarction In **septic endocarditis** vegetatio may get dislodged forming sources of embolus and may ca multiple abscesses in various organs having the plugging effec In right heart failure or dilatation thrombi may form in the rig auricle and part of which may be dislodged to go to the rig ventricle thence to plug the smaller pulmonary arteries with i infarct formation or when a big pulmonary vessel is obstruct generally sudden death is the result Rarely acute bacter endocarditis of the right heart may lead to septic embolisatio of the lung

(B) ***Arterial thrombosis*** *is rarer than venous thrombosis* may result from arterial embolism or from disease of th arterial wall or injury etc or from atheroma arteritis ar various other causes Coronary thrombosis is common and f its details see that chapter

Thrombosis of the small arteries of brain are common wh narrowed as a result of disease usually syphilis in persons b low 30 to 40 years and atheroma in the elderly

Thrombosis of a big artery is likely to cause gangrene the limb preceded by pallor which later becomes mottled t be *finally black and generally gangrene with line of demarca*tion follows

(C) **Venous Thrombosis —Femoral Thrombosis** is one the commonest met with in practice It generally occurs afte child birth and in anaemic and marasmic conditions after infe tious fevers specially typhoid fever and occasionally after in fluenza and pneumonia In surgical operations notably septic conditions are dealt with this is likely to occur Th common site is the left one because of the pressure of the righ common iliac artery on the left common iliac vein There ar constitutional symptoms like fever slight rise in pulse rate wit local oedema and a hard cord like swelling in the course of th vein due to thrombosis

Sometimes thrombosis of veins may occur in marasmic conditions secondary to cancer tuberculosis and tertiary syphilis

**Complications & Sequelae**—In femoral thrombosis generally the collateral circulation is satisfactory In cases where both the artery and the vein are thrombosed gangrene is not unlikely If the thrombosis spreads up into the inferior vena cava both the legs are likely to be swollen and oedematous Recovery under this conditions even is possible provided collateral circulation is established by means of veins passing up from the legs to the axillae But however when the clot reaches the openings of the renal veins fatal results nearly always follow from renal thrombosis Embolic phenomenon through a dislodged clot from one of the femoral veins may pass to the lung via the right heart

**Treatment**—For the details see plastic phlebitis detailed already

## EMBOLISM

According to the nature and type of circulation emboli are found to show effects either (1) in the systemic circulation (2) in pulmonary circulation and (3) in the portal circulation

(1) The main source of emboli in the **systemic circulation** are derived from clots in the left auricle in mitral stenosis and rarely in mitral regurgitation and also when there are slowing of currents in a greatly dilated and hypertrophied left ventricle These are aseptic emboli As to the septic emboli from endocarditis etc details will be found under that heading and under septic inflammations of the vessels described in the previous few pages

(2) As expected emboli in the **pulmonary circulation** generally originate from clots formed in the right auricle and the ventricle and rarely from septic endocarditis of the tricuspid and pulmonary valves They may also come from any area of the systemic venous circulation An important form of pulmonary embolism may come almost as a bolt from the blue on about the tenth day of an apparently successful abdominal operation or after an uneventful child birth If one of the bigger vessels is affected death may be immediate otherwise haemoptysis and pleurisy will suggest the diagnosis The clot generally comes from one of the iliac veins Similar results may follow from fat air or parasitic embolism Recent studies on autopsy cases death following pulmonary troubles support the view that embolism is much more common cause of lung infarction (87 per cent in a series) and the source is generally some venous thrombus In operations and fractures and specially in heart disease with failure and stagnation most commonly thrombi of the veins of the pelvis and leg are the main sources of pulmonary embolism

(3) In embolism in the **portal circulation,** portions of the clot in any of the areas of portal vein get finally arrested in the liver Numerous septic abscess formation due to septic emboli being arrested in the liver from a suppurative appendix in which no barrier has been formed is an example on question

**Clinical manifestations** (i) **Cerebral embolism** —The onset is very sudden and the left side of the brain is more commonly affected than the right because of the anatomical situation of the arteries Hemiplegia generally with aphasia is the result Unconsciousness may be temporary during the actual attack

(ii) **Renal artery embolism** —Sudden pain at the back in the region of the kidneys and haematuria and albuminuria which may last for a day or two or longer if a larger branch is involved are diagnostic

(iii) **Embolism of splenic artery** —There is usually sudden pain generally associated with enlargement of the spleen with local pain and tenderness The subsequent results will depend upon the size of the vessel and the nature of the embolus

(iv) **Embolism of the central artery of the retina** —It is not an uncommon condition in cases of mitral stenosis or in septic endocarditis involving the aortic and mitral valves Sudden pain in the eyes with blindness of that side and pale optic disc and the small size of the retinal vessels are highly suggestive Sometimes arterial thrombosis may follow in elderly subjects of hypertension or atheroma

(v) **Superior mesenteric artery embolism** —Patient complains of sudden pain in the abdomen usually with distension followed generally by gangrene of the small intestine inspite of there being considerable possibilities of collateral circulation **Complete obstructive phenomena and blood in the stool and in peritoneal cavity are highly suggestive** Immediate surgical interference may do good except when an extensive portion of the gut is not involved

(vi) **Embolism of large artery of a limb** is fortunately not common but when it occurs there is acute pain in the limb followed by loss of power and numbness Below the seat of embolism pulse is generally imperceptible and gangrene is frequent

(vii) **Fat embolism** —Fracture of one of the long bones may be followed in a few hours time by fat embolism to be lodged generally into the lungs Sometime they may escape through the lungs into the general circulation and may get lodged into the glomeruli of the kidney or in the brain or spinal cord Sometime haemorrhage into or rupture of the liver may set free such fat emboli

In such a case there is usually cyanosis and crepitations at the base of the lung resulting from oedema of that organ It

is afebrile When lodged in the brain vessels there may be delirium coma and rarely localised paralysis In kidney cases oil drops stainable black by osmic acid may suggest the diagnosis

(viii) **Air embolism** —In careless intravenous injections of any substance in which air might be driven in or in cases of air distension of the urinary bladder or the urethera or operation on a large vein may cause entrance of air into the circulation If the quantity of air is large immediate death may follow though the exact mechanism how this fatality results is still *doubtful but may be due to arrest of pulmonary circulation or* cerebral anaemia Respiratory embarrassment convulsion feeble pulse and the characteristic sound of air entry into the vein are usually suggestive

**Treatment** —Of fat embolism is mainly to sustain the heart Amylnitrite may be helpful oxygen inhalation may be of use

Treatment of **air embolism** comprises in immediately occluding the vein Stimulants should be administered subcutaneously Inhalation of amylnitrite may do good Venesection may relieve embarrassment of the heart The rest of the treatment is more or less symptomatic

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